STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ST ML 22651	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME: UTU-63047A
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP	9. WELL NAME and NUMBER: NBU 1022-2A2T
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY Denver STATE CO ZIP 80217-3779 PHONE NUMBER: (720) 929-6226	10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field
4. LOCATION OF WELL (FOOTAGES) 636591X 4427071Y AT SURFACE: 203' FNL & 896' FEL LAT 39.984725 LON -109.400228 (NAD 27) AT PROPOSED PRODUCING ZONE: N/A 39.984606 -109.400257	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 2 10S 22E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 24.7 miles southwest of Ouray, Utah	12. COUNTY: Uintah / 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 203'	16. NUMBER OF ACRES IN LEASE: 620.25 / 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: Unit Well
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 20'	19. PROPOSED DEPTH: 8,600 / 20. BOND DESCRIPTION: 22013542
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 4974' GR	22. APPROXIMATE DATE WORK WILL START: / 23. ESTIMATED DURATION: 10 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
12.25	9.625	J-55	36#	1900 ~~4,700~~	Premium Cement	215	1.18	15.6
					Premium Cement	50	1.18	15.6
7.875	4.5	I-80	11.6#	8,600	Premium Lite II	400	3.38	11.0
					50/50 Poz G	1380	1.31	14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☑ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Kevin McIntyre TITLE Regulatory Analyst

SIGNATURE [signature] DATE 11/6/2008

(This space for State use only)

API NUMBER ASSIGNED: 43-047-40434

Approved by the
Utah Division of
Oil, Gas and Mining

APPROVAL:

Date: 02-02-09

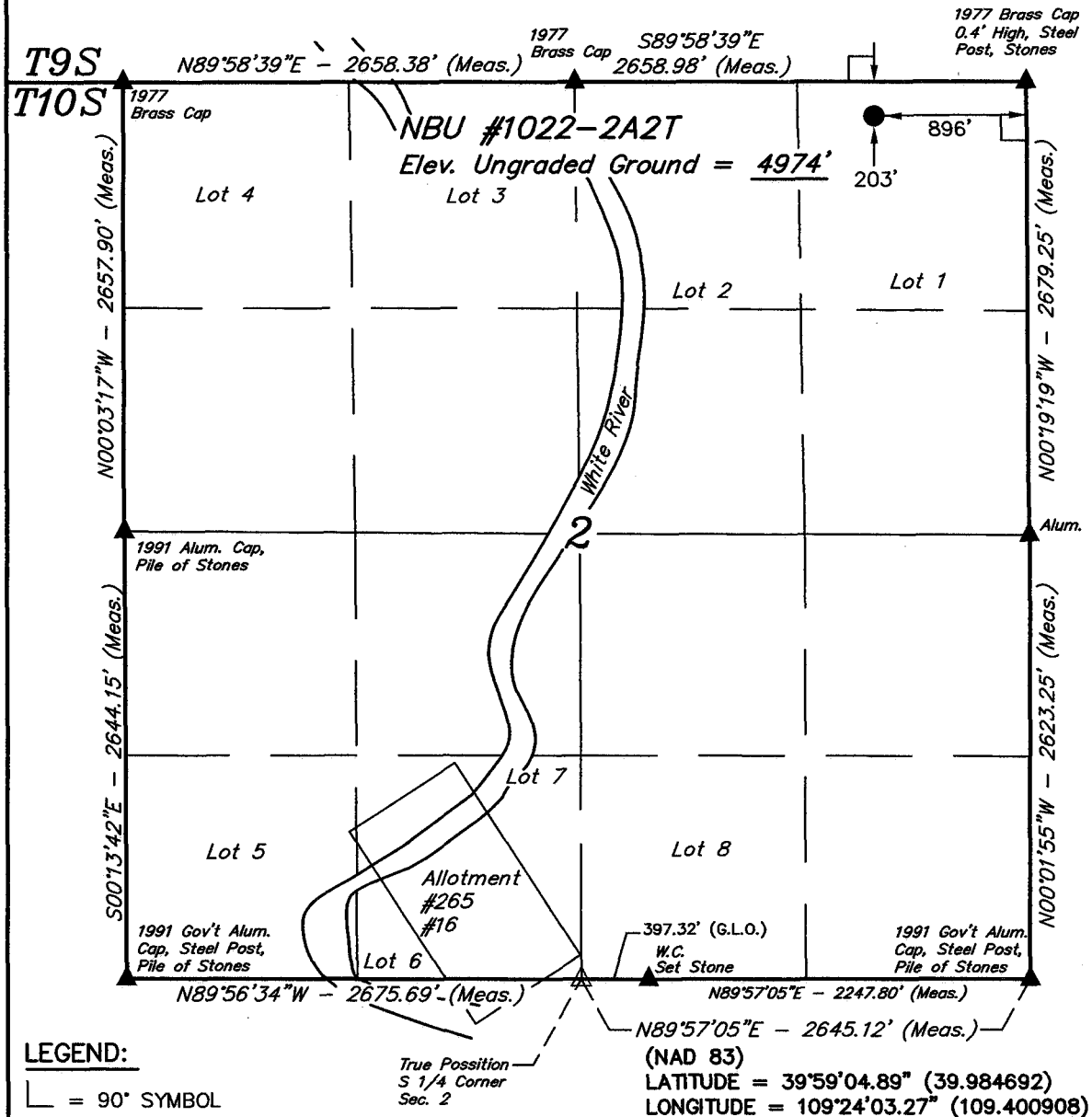
(See Instructions on Reverse Side)

By: [signature]

RECEIVED
DEC 01 2008
DIV. OF OIL, GAS & MINING

(11/2001)

T10S, R22E, S.L.B.&M.



Kerr–McGee Oil & Gas Onshore LP

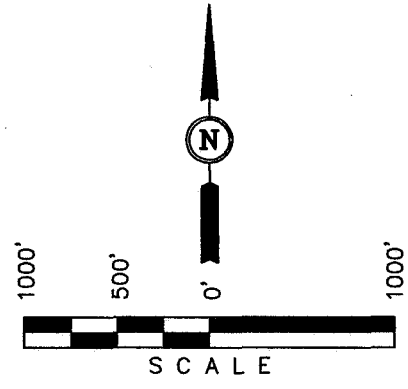
Well location, NBU #1022–2A2T, located as shown in Lot 1 of Section 2, T10S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

LEGEND:

- └ = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE–ESTABLISHED. (Not Set on Ground.)

(NAD 83)
LATITUDE = 39°59'04.89" (39.984692)
LONGITUDE = 109°24'03.27" (109.400908)
(NAD 27)
LATITUDE = 39°59'05.01" (39.984725)
LONGITUDE = 109°24'00.82" (109.400228)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	06–13–08	07–10–08
PARTY: L.K. D.D. C.H.	REFERENCES: G.L.O. PLAT	
WEATHER: HOT	FILE: Kerr–McGee Oil & Gas Onshore LP	

NBU 1022-2A2T
Twin to CIGE #67D
NENE Sec. 2, T10S,R22E
UINTAH COUNTY, UTAH
ST ML 22651

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers:**

Formation	Depth
Uinta	0- Surface
Green River	1139'
Birds Nest	1377'
Mahogany	1887'
Wasatch	4188'
Mesaverde	6486'
MVU2	7390'
MVL1	7981'
TD	8600'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

Substance	Formation	Depth
	Green River	1139'
Water	Birds Nest	1377'
Water	Mahogany	1887'
Gas	Wasatch	4188'
Gas	Mesaverde	6486'
Gas	MVU2	7390'
Gas	MVL1	7981'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

6. **Evaluation Program:**

Please refer to the attached Drilling Program.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8600' TD, approximately equals 5332 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3440 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance
Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background
In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at

40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60

feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

NBU 1022-2A2T
Twin to CIGE #67D
NENE SEC. 2, T10S, R22E
UINTAH COUNTY, UTAH
ST ML 22651

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

Approximately 0.1 mi. +/- of access road is proposed. Refer to Topo Map B.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Shadow Gray, a non-reflective earthtone.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

No new pipeline utilizing the existing CIGE #67D pipeline. No TOPO D attached.

5. **Location and Type of Water Supply:**

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. **Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. **Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with

dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility, Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond, SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond, Sec. 2, T10S, R23E.

8. Ancillary Facilities:

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. Surface/Mineral Ownership:

SITLA
675 East 500 South, Suite 500
Salt Lake City, UT 84102

12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. Lessee's or Operators's Representative & Certification:

Kevin McIntyre
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6226

Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre

11/06/2008
Date

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	January 22, 2009
WELL NAME	**NBU 1022-2A2T**	TD	8,600' MD/TVD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah ELEVATION 4,974' GL KB 4,989'
SURFACE LOCATION	NENE 203' FNL & 896' FEL, SEC. 2, T10S, R22E (Lot 1)		BHL Straight Hole
	Latitude: 39.984725 Longitude: -109.400228		NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: UDOGM (MINERALS & SURFACE), BLM, Tri-County Health Dept.		

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 36#, J-55, LTC	Air mist
Catch water sample, if possible, from 0 to 4,188'					
	Green River @	1,139'			
	Top of Birds Nest Water @	1377'			
	Mahogany @	1,887'			
	Wasatch @	4,188'			
	Preset f/ GL @ 1,900' MD				
Mud logging program TBD Open hole logging program f/ TD - surf csg			7-7/8"	4-1/2",11.6#, I-80 or equivalent LTC casing	Water/Fresh Water Mud 8.3-10.0 ppg
	Mverde @	6,486'			
	MVU2 @	7,390'			
	MVL1 @	7,981'			
	TD @	8,600'			Max anticipated Mud required 12.0 ppg

Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	1900	36.00	J-55	LTC	1.01	2.27	8.43
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	8600	11.60	I-80	LTC	2.24	1.18	2.31

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.0 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3440 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + 25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,680'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	400	60%	11.00	3.38
	TAIL	4,920'	50/50 Poz/G + 10% salt + 2% gel + 1% R-3	1380	60%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utililzed.

DRILLING ENGINEER: _____ DATE: _____

Brad Laney

DRILLING SUPERINTENDENT: _____ DATE: _____

Randy Bayne

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS
ONSHORE LP'S 73 PROPOSED NBU WELL LOCATIONS
IN TOWNSHIP 10S, RANGE 22E
UINTAH COUNTY, UTAH

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 73 PROPOSED NBU WELL LOCATIONS IN TOWNSHIP 10S, RANGE 22E UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Bureau of Land Management
Vernal Field Office
and
School and Institutional
Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 08-268

October 16, 2008

United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

INTRODUCTION

A Class I literature review was completed by Montgomery Archaeological Consultants, Inc. (MOAC) in October 2008 of Kerr-McGee Onshore's 73 proposed NBU well locations in Township 10S, Range 22E. The project area is situated south of the White River and southeast of the Ouray, Uintah County, Utah. The wells are designated NBU 1022-1I, 1022-1J, 1022-1N, 1022-1P, 1022-2A2T,1022-2A3S, 1022-2A4S, 1022-2B2S, 1022-2D, 1022-2F, 1022-2J1T, 1022-2J2S, 1022-2J3S, 1022-2O2S, 1022-03A2T, 1022-03A3S, 1022-03B2S, 1022-03B4T, 1022-03C1S, 1022-04H2CS, 1022-04H3BS, 1022-O3H2T, 1022-03L4BS, 1022-03L3DS, 1022-03M1DS, 1022-03M2DS, 1022-03J3T, 1022-03L2T, 1022-O3N4T, 1022-03P4T, 1022-03O3T, 1022-04K3S, 1022-04M1S, 1022-05H2BS, 1022-05H2CS, 1022-05E4S, 1022-05F2S, 1022-05K1S, 1022-05L1S, 1022-05IT, 1022-06DT, 1022-06ET, 1022-06FT, 1022-06I3AS, 1022-06J4CS, 1022-06O1BS, 1022-06P1CS, 1022-7AT, 1022-7A4BS, 1022-7A4CS, 1022-7B2DS, 1022-08GT, 1022-08IT, 1022-09AT, 1022-11F4S, 1022-11J3S, 1022-11K1T, 1022-11K2S, 1022-11K3S, 1022-11L2S, 1022-11L3S, 1022-11M1S, 1022-13H, 1022-24O, 1022-24O2S, 1022-24P2S, 1022-24P4S, 1022-25H, 1022-32B3S, 1022-32D1S, 1022-32D4AS, 1022-32D4DS, and 1022-35M.

The purpose of this Class I review is to identify, classify, and evaluate the previously conducted cultural resource inventories and archaeological sites in the project area in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act of 1966 (as amended). Also, the inventory was implemented to attain compliance with a number of federal and state mandates, including the National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and the Utah State Antiquities Act of 1973 (amended 1990).

The project area in which Kerr-McGee Onshore's 73 proposed NBU well locations occur was previously inventoried by MOAC in 2007 for the Class III inventory of Township 10 South, Range 22 East (Montgomery 2008; U-07-MQ-1438b,s,p). A file search was completed by consulting MOAC's Class I existing data review of 459 square miles (293,805 acres) covering the Greater NBU study area between Bonanza and Ouray in Uintah County, northeastern Utah (Patterson et al. 2008). Kerr-McGee Oil & Gas Onshore LP proposes to explore and develop oil and natural gas resources throughout the area. Record searches were performed for this Class I project by Marty Thomas at the Utah State Historic Preservation Office (SHPO) on various dates between June 14, 2006 and January 27, 2007. The results of this Class I data review and Class III inventory indicated that no previously recorded sites occur in the current project area.

DESCRIPTION OF THE PROJECT AREA

The project area is situated west of the White River and both sides of Bitter Creek in the Uinta Basin. The legal description is Township 10S, Range 22E, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 24, 25, 32, 36; Township 11S, Range 22E, Sections 1 and 2 (Figures 1, 2 and 3; Table 1). Land status is public land administered by the Bureau of Land Management (BLM) Vernal Field Office and School and Institutional Trust Lands Administration (SITLA) property.

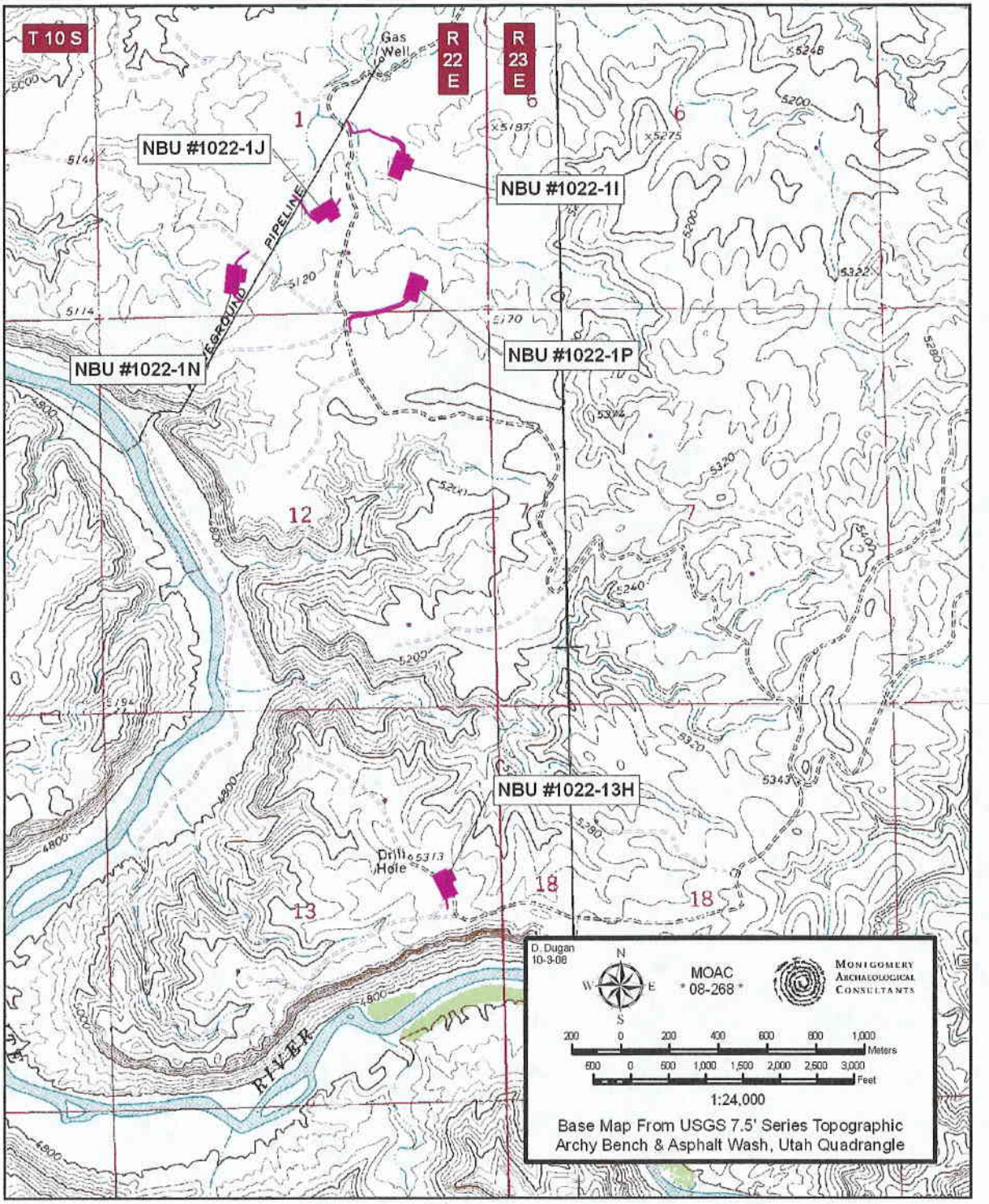
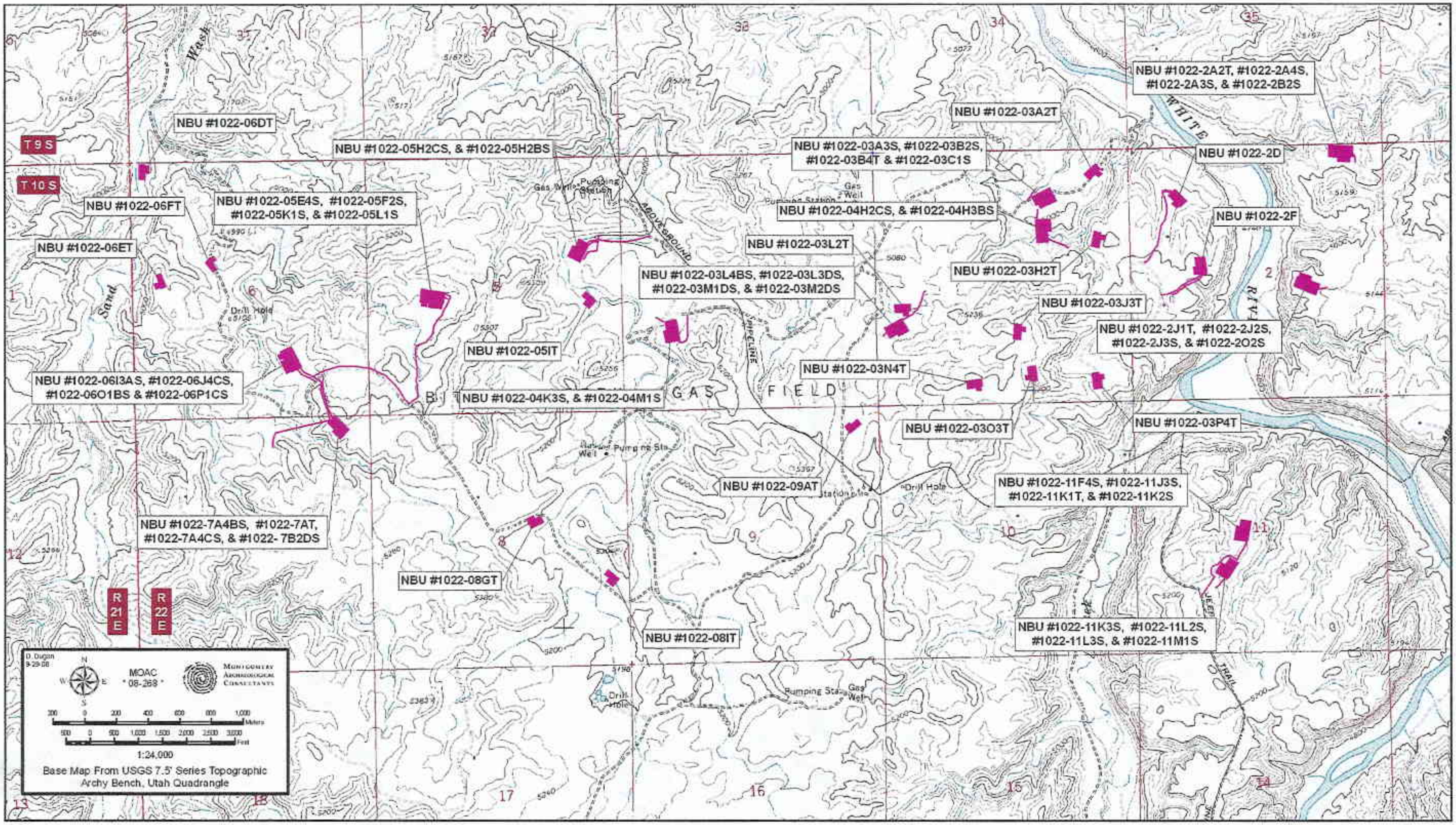


Figure 1. Location of Kerr-McGee Onshore's Well Pads in T10S, R22E.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NBU #1022-06DT
NBU #1022-05H2CS, & #1022-05H2BS
NBU #1022-03A3S, #1022-03B2S,
#1022-03B4T & #1022-03C1S
NBU #1022-2D
T 9 S
T 10 S
NBU #1022-06FT
NBU #1022-05E4S, #1022-05F2S,
#1022-05K1S, & #1022-05L1S
NBU #1022-04H2CS, & #1022-04H3BS
NBU #1022-2F
NBU #1022-06ET
NBU #1022-03L2T
NBU #1022-03H2T
NBU #1022-03L4BS, #1022-03L3DS,
#1022-03M1DS, & #1022-03M2DS
NBU #1022-03J3T
NBU #1022-2J1T, #1022-2J2S,
#1022-2J3S, & #1022-2O2S
NBU #1022-05IT
NBU #1022-03N4T
NBU #1022-06I3AS, #1022-06J4CS,
#1022-06O1BS & #1022-06P1CS
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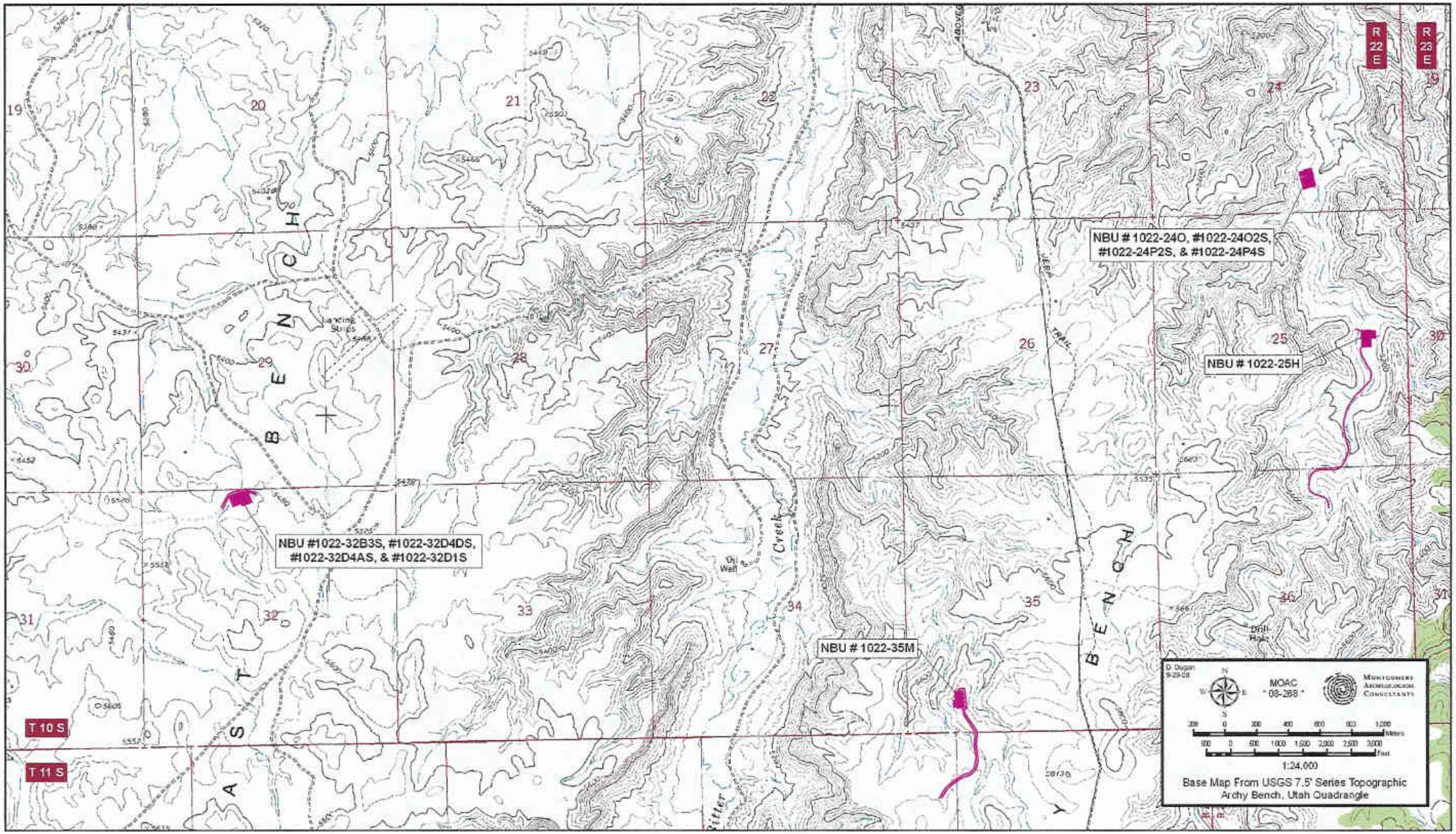
NBU #1022-03O3T
NBU #1022-03P4T
NBU #1022-09AT
NBU #1022-11F4S, #1022-11J3S,
#1022-11K1T, & #1022-11K2S
NBU #1022-7A4BS, #1022-7AT,
#1022-7A4CS, & #1022- 7B2DS
NBU #1022-08GT
R 21 E
R 22 E
NBU #1022-08IT
NBU #1022-11K3S, #1022-11L2S,
#1022-11L3S, & #1022-11M1S
D. Dugan
9-29-08
MOAC
" 08-268 "
Montgomery Archaeological Consultants
1:24,000
Base Map From USGS 7.5' Series Topographic
Archy Bench, Utah Quadrangle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NBU # 1022-25H
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#1022-32D4AS, & #1022-32D1S
NBU # 1022-35M
R 22 E
R 23 E
T 10 S
T 11 S
MOAC
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1:24,000
Base Map From USGS 7.5' Series Topographic
Archy Bench, Utah Quadrangle

Table 1. Kerr-McGee Onshore's 73 NBU Well Locations.

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
NBU 1022-1I	T10S, R22E, Sec. 1 NE/SE	Pipeline: 1000 ft Access: 200 ft	None
NBU 1022-1J	T10S, R22E, Sec. 1 NW/SE	Pipeline: 400 ft Access: 50 ft	None
NBU 1022-1N	T10S, R22E, Sec. 1 SE/SW	Pipeline: 150 ft Access: 200 ft	None
NBU 1022-1P	T10S, R22E, Sec. 1 SE/SE	Pipeline: 1050 ft Access: 1000 ft	None
NBU 1022-2A2T, 1022-2A4S 1022-243S, 1022-2B2S	T10S, R22E, Sec. 2 NE/NE	Access: 200 ft	None
NBU 1022-2D	T10S, R22E, Sec. 2 NW/NW	Pipeline: 1600 ft	None
NBU 1022-2F	T10S, R22E, Sec. 2 SE/NW	Pipeline: 800 ft Access: 1000 ft	None
NBU 1022-2J1T, 1022-2J2S, 1022-2J3S, 1022-202S	T10S, R22E, Sec. 2 NW/SE	Pipeline: 200 ft	None
NBU 1022-03A2T	T10S, R22E, Sec. 3 NE/NE	None	None
NBU1022-03A3S, 1022-03B2S 1022-03B4T, 1022-03C1S	T10S, R22E, Sec. 3 NW/NE	None	None
NBU 1022-04H2CS 1022-04H3BS	T10S, R22E, Sec. 3 SW/NE	Pipeline: 450 ft Access: 200 ft	None
NBU 1022-03H2T	T10S, R22E, Sec. 3 SE/NE	None	None
NBU 1022-03J3T	T10S, R22E, Sec. 3 NW/SE	None	None
NBU 1022-03L2T	T10S, R22E, Sec. 3 NW/SW	None	None
NBU 1022-03L4BS, 1022-03L3DS 1022-03M1DS, 1022-03M2DS	T10S, R22E, Sec. 3 NW/SW	Pipeline: 800 ft Access: 100 ft	None
NBU 1022-03N4T	T10S, R22E, Sec. 3 SE/SW	None	None
NBU 1022-03O3T	T10S, R22E, Sec. 3 SW/SE	None	None
NBU 1022-03P4T	T10S, R22E, Sec. 3 SE/SE	None	None

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
NBU 1022-04K3S, 1022-04M1S	T10S, R22E, Sec. 4 NW/SW	Pipeline: 200 ft Access: 600 ft	None
NBU 1022-05H2CS, 1022-05H2BS	T10S, R22E, Sec. 5 SE/NE	Pipeline: 800 ft Access: 1200 ft	None
NBU 1022-05E4S, 1022-05F2S 1022-05K1S, 1022-05L1S	T10S, R22E Sec. 5 NE/SW	Pipeline: 4800 ft Access: 100 ft	None
NBU 1022-05IT	T10S, R22E, Sec. 5 NE/SE	None	None
NBU 1022-06DT	T10S, R22E, Sec. 6 NW/NW	None	None
NBU 1022-06ET	T10S, R22E, Sec. 6 SW/NW	None	None
NBU 1022-06FT	T10S, R22E, Sec. 6 SE/NW	None	None
NBU 1022-06I3AS, 1022-06J4CS 1022-06O1BS, 1022-06P1CS	T10S, R22E, Sec. 6 SW/SE	Pipeline: 1400 ft Access: 450 ft	None
NBU 1022-7A4BS, 1022-7AT 1022-7A4CS, 1022-7B2DS	T10S, R22E, Sec. 7 NE/NE	Pipeline: 1300 ft Access: 1000 ft	None
NBU 1022-08GT	T10SS, R22E, Sec. 8 SW/NE	None	None
NBU 1022-08IT	T10S, R22E, Sec. 8 NE/SE	None	None
NBU 1022-09AT	T10S, R22E, Sec. 9 NE/NE	None	None
NBU 1022-11F4S, 1022-11J3S, 1022-11K1T, 1022-11K2S	T10S, R22E, Sec. 11 NE/SW	Pipeline: 1600 ft	None
NBU 1022-11K3S, 1022-11L2S, 1022-11L3S, 1022-11M1S	T10S, R22E, Sec. 11 NE/SW	Pipeline: 500 ft Access: 250 ft	None
NBU 1022-13H	T10S, R22E, Sec. 13 SE/NE	Pipeline: 100 ft	
NBU 1022-24O, 1022-24O2S 1022-24P2S, 1022-24P4S	T10S, R22E, Sec. 24 SW/SE	None	None
NBU 1022-25H	T10S, R22E, Sec. 25 SE/NE	Pipeline: 4000 ft	None

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
NBU 1022-32B3S, 1022-32D4DS 1022-3-2D4AS, 1022-32D1S	T10S, R22E, Sec. 32 NE/NW	Pipeline: 900 ft Access: 800 ft	None
NBU 1022-35M	T10S, R22E, Sec. 35 SW/SW	Pipeline: 2750 ft Access: 2200 ft	None

Environmental Setting

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. The geology is comprised of Tertiary age deposits, which include Paleocene age deposits and Eocene age fluvial and lacustrine sedimentary rocks. The Uinta Formation, which is predominate in the project area, occurs as eroded outcrops (formed by fluvial deposited, stream laid interbedded sandstone and mudstone), and is known for its prolific paleontological localities. Specifically, the inventory area is situated south of the White River and on both sides of Cottonwood Wash. Elevation ranges from 5080 to 5680 ft asl. The project occurs within the Upper Sonoran Desert Shrub Association which includes sagebrush, shadscale, greasewood, mat saltbush, snakeweed, rabbitbrush, and prickly pear cactus. Modern disturbances include livestock grazing, roads, and oil/gas development.

CLASS I RESULTS AND RECOMMENDATIONS

The Class I literature review of Kerr-McGee Onshore's 73 proposed NBU well locations and associated pipeline/access corridors in Township 10S, Range 22E resulted in the location of no cultural resources. Based on the findings, a determination of "no adverse impact" is recommended for the undertaking pursuant to Section 106, CFR 800.

REFERENCES CITED

Montgomery, J. A.
2007 Cultural Resource Management Report for Kerr-McGee Oil and Gas Onshore LP's Greater NBU Blocks in Township 10 South, Range 22 East, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-07-MQ-1438bsp.

Patterson, J. J., J. Fritz, K. Lower-Eskelson, R. Stash and A. Thomas
2008 NBU Class I Existing Data Review for Kerr-McGee Oil & Gas Onshore LP, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Stokes, W. L.
1986 *Geology of Utah*. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

IPC #08-147

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Twin Wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2, T 10 S, R 22 E)

Archy Bench
Topographic Quadrangle
Uintah County, Utah

July 25, 2008

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by the BLM Vernal Field Office and James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Kerr McGee's proposed twin wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2 , T 10 S, R 22 E) was conducted by Stephen D. Sandau Jason Klimek and Arica Scheetz on July 22 and 23, 2008. The reconnaissance survey was conducted under the Utah BLM Paleontological Resources Use Permit #UT08-006C and Utah Paleontological Investigations Permit #07-356. This survey to locate, identify, and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the Federal and State government, paleontologically sensitive geologic formations on State lands that are considered for exchange or may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

1) The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321.et. Seq., P.L. 91-190);
2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579);
3) The National Historic Preservation Act.16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320; and
4) The Utah Geological Survey. S. C. A.: 63-73-1. (1-21) and U.C.A.: 53B-17-603

The new Potential Fossil Yield Classification (PFYC) System (October, 2007) replaces the Condition Classification System from Handbook H-8270-1. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- ***Class 1*** **– Very Low**. Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- ***Class 2*** **– Low.** Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial, and colluvial deposits etc…)
- ***Class 3*** **– Moderate or Unknown.** Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.
    - ***Class 3a*** **– Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.

- *Class 3b* – **Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.

- ***Class 4* – High.** Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.
  - *Class 4a* – Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
  - *Class 4b* – Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- ***Class 5* – Very High.** Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
  - *Class 5a* - Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
  - *Class 5b* - Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

LOCATION

Kerr McGee's proposed twin wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2 , T 10 S, R 22 E) are on lands managed by the BLM and the State of Utah Trust Lands Administration (SITLA), in and slightly northeast of Sand Wash, south of Coyote Wash and on the East Bench, just 16 miles south and east of Ouray, Utah, and 12-16 miles west of Bonanza, Utah. The project area can be found on the Archy Bench 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) ranging in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992) and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded, coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929) and the Myton Member previously regarded as the Uinta C.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments inter-fingering with over-bank deposits of silt and mudstone and westward flowing channel sands and fluvial clays, muds, and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology, and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well-known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

The Duchesne River Formation of the Uinta Basin in northeastern Utah is composed of a succession of fluvial and flood plain deposits composed of mud, silt, and sandstone. The source area for these late Eocene deposits is from the Uinta Mountains indicated by paleocurrent data (Anderson and Picard, 1972). In Peterson's (1931c) paper, the name "Duchesne Formation" was applied to the formation and it was later changed to the "Duchesne River Formation" by Kay (1934). The formation is divided up into four members: the Brennan Basin, Dry Gulch Creek, LaPoint, and Starr Flat (Anderson and Picard, 1972). Debates concerning the Duchesne River Formation, as to whether its age was late Eocene or early Oligocene, have surfaced throughout the literature of the last century (Wood et al., 1941; Scott 1945). Recent paleo-magnetostratigraphic work (Prothero, 1996) shows that the Duchesne River Formation is late Eocene in time.

FIELD METHODS

In order to determine if the proposed project area contained any paleontological resources, a reconnaissance survey was performed. An on-site observation of the proposed areas undergoing surficial disturbance is necessary because judgments made from topographic maps alone are often unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces and are of particular importance.

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual wells and their associated pipelines and access roads.

NBU #922-32AT

The proposed twin is located on the existing well "NBU #190" in the NE/NE quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located on a colluvium-covered hill derived from underlying sandstones which outcrop along the perimeter. No fossils were found.

NBU #922-32IT

The proposed twin is located on the existing well "NBU #282" in the NE/SE quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located on a colluvium-covered hill of inter-bedded brown/tan sandstones.
No fossils were found.

NBU #922-32MT
The proposed twin is located on the existing well "NBU #281" in the SW/SW quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located among hills of inter-bedded tan sandstones and variegated green siltstone.
No fossils were found.

NBU #922-32OIT
The proposed twin is located on the existing well "NBU #404" in the SW/SE quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed twin is located among hills of inter-bedded gray sandstones and variegated mudstones. No fossils were found.

NBU #922-35IT
The proposed twin is located on the existing well "CIGE #118" in the NE/SE quarter-quarter section of Sec. 35, T 9 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones which outcrop along the perimeter. No fossils were found.

NBU #922-36NT
The proposed twin is located on a previously existing well "CIGE #147" in the SE/SW quarter-quarter section of Sec. 36, T 9 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones. No fossils were found.

NBU #1022-2JIT (multi-well also included: 2J25, 2J3S & 2O2S)
The proposed twin is located on the existing well "CIGE #10" in the NW/SE quarter-quarter section of Sec. 2, T 10 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones. No fossils were found.

NBU #1022-2A2T (multi-well also included: 2B2S, 2A3S & 2A4S)
The proposed twin is located on the existing well "CIGE #67A" in the NE/NE quarter-quarter section of Sec. 2, T 10 S, R 22 E (Figure 2). The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones. No fossils were found.

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
"NBU #922-32AT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located on a colluvium-covered hill derived from underlying sandstones which outcrop along the perimeter.	No fossils were found. **Class 3a**
"NBU #922-32IT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located on a colluvium-covered hill of inter-bedded brown/tan sandstones.	No fossils were found. **Class 3a**
"NBU #922-32MT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located among hills of inter-bedded tan sandstones and variegated green siltstone.	No fossils were found. **Class 3a**
"NBU #922-32OIT" (Sec. 32, T 9 S, R 22 E)	The proposed twin is located among hills of inter-bedded gray sandstones and variegated mudstones.	No fossils were found. **Class 3a**
"NBU #922-35IT" (Sec. 35, T 9 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones which outcrop along the perimeter.	No fossils were found. **Class 3a**
"NBU #922-36NT" (Sec. 36, T 9 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones.	No fossils were found **Class 3a**
"NBU #1022-2A2T" (Sec. 2, T 10 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones.	No fossils were found. **Class 3a**
"NBU #1022-2JIT" (Sec. 2, T 10 S, R 22 E)	The proposed twin is located on colluvium-covered hills derived from underlying tan sandstones.	No fossils were found. **Class 3a**

RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee's proposed twin wells "NBU #922-32AT, #922-32IT, #922-32MT, #922-32OIT, #922-35IT, #922-36NT" (Sec. 32, 35 & 36, T 9 S, R 22 E) & "NBU #1022-2A2T & #1022-2JIT" (Sec. 2 , T 10 S, R 22 E). The twin wells covered in this report showed no signs of vertebrate fossils. Therefore, we recommend that no paleontological restrictions should be placed on the development of the projects included in this report.

Buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors yet indications from surface fossils predict that little if any vertebrate fossils will be disturbed.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, Operator (Lease Holder) will report all occurrences of paleontological resources discovered to a geologist with the Vernal Field Office of the BLM and the Office of the State Paleontologist. The operator is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the BLM and State as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage. These resources are afforded protection under 43 CFR 3802 and 3809, and penalties possible for the collection of vertebrate fossils are under 43 CFR 8365.1-5.

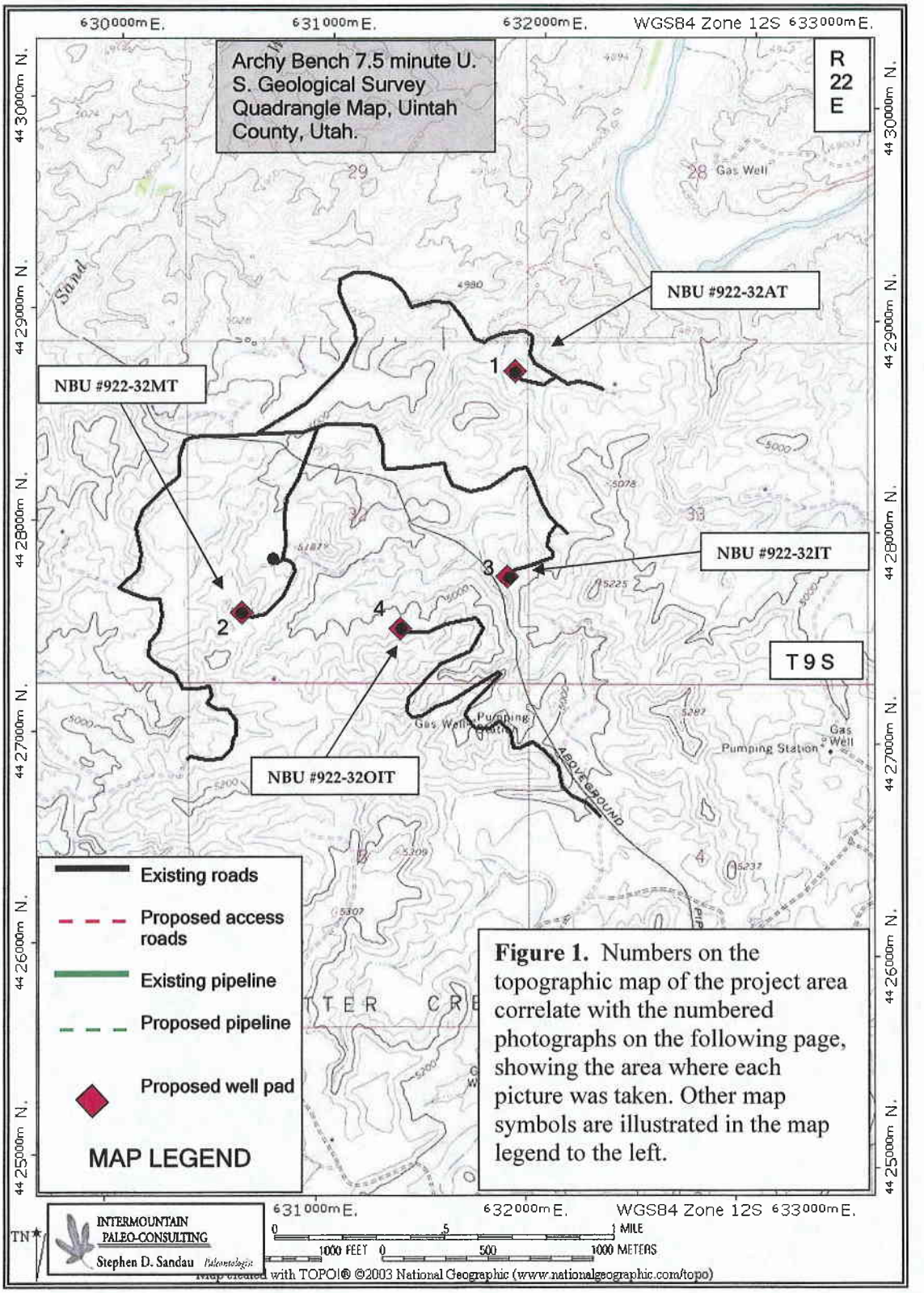
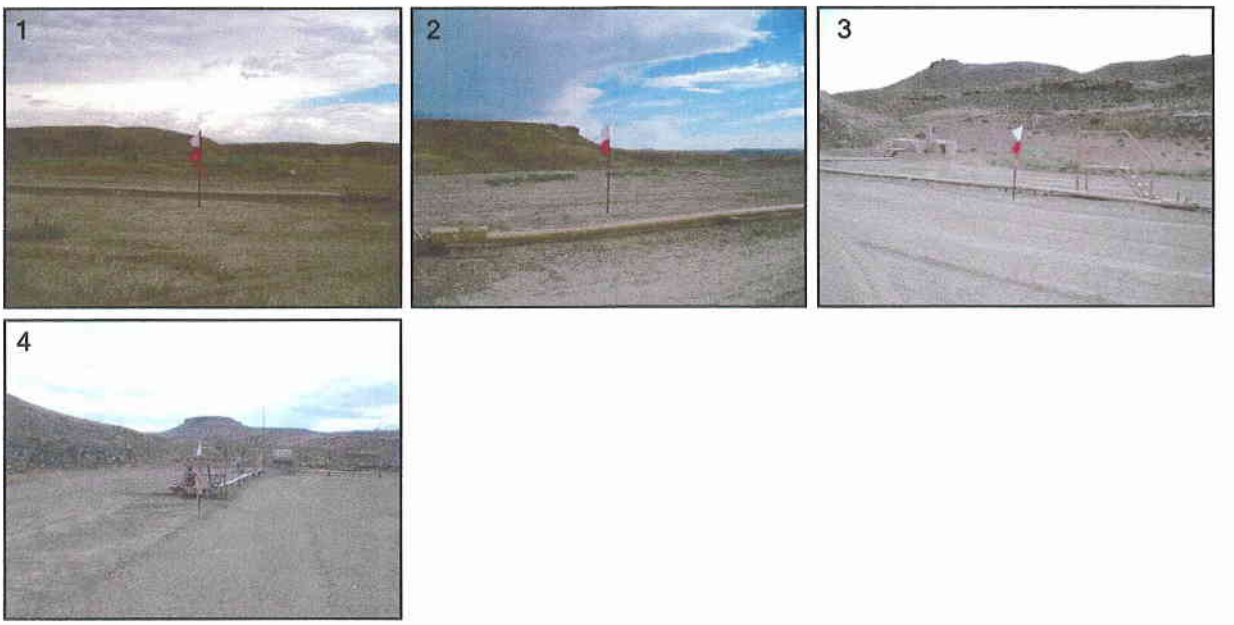


Figure 1. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.

Figure 1. *continued. . .*



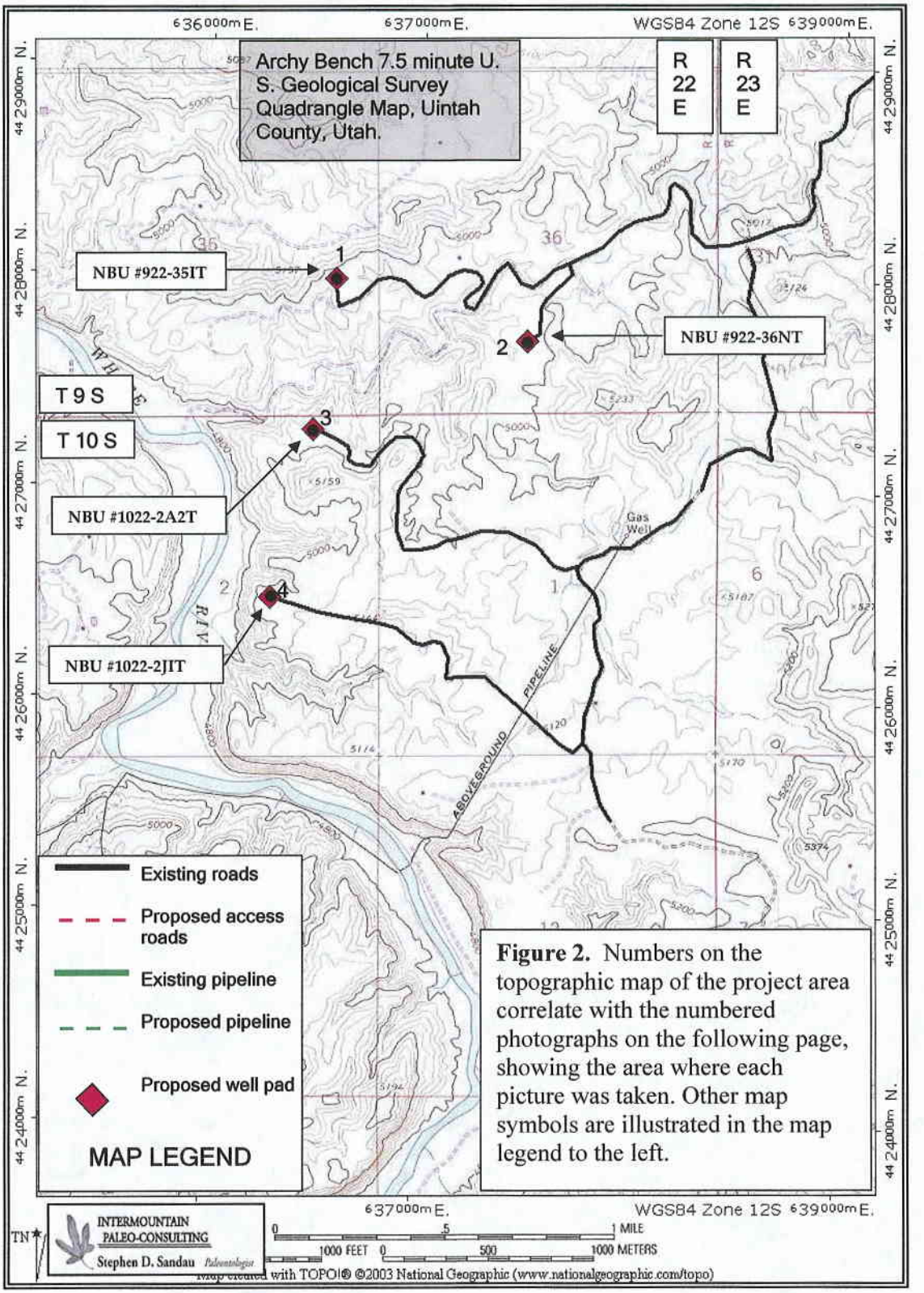


Figure 2. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.

Figure 2. *continued. . .*

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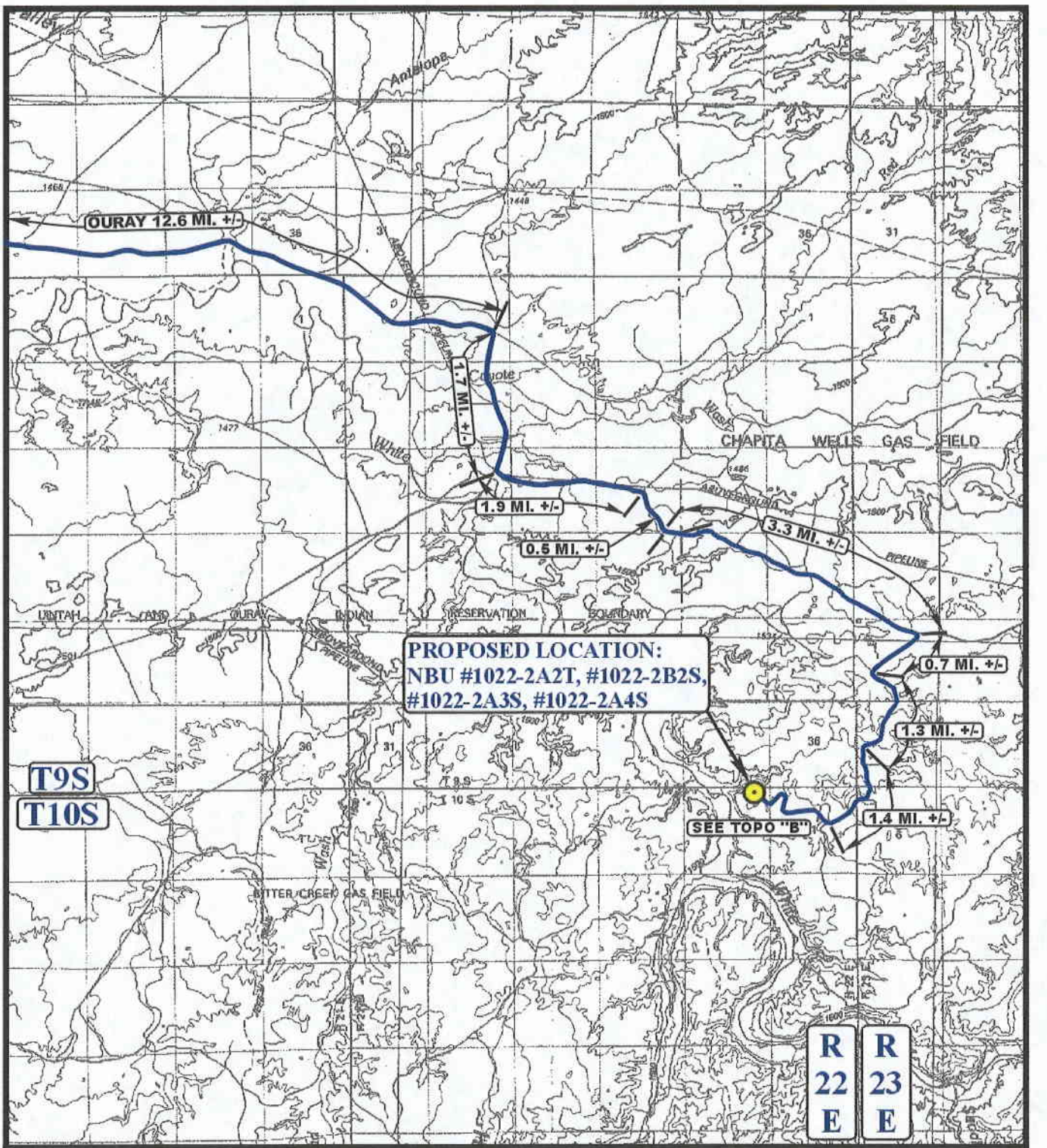
Kerr McGee Oil & Gas Onshore LP.
NBU #1022-2A2T, #1022-2B2S, #1022-2A3S, #1022-2A4S
SECTION 2, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN A EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 3.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFTT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 0.1 MILE TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.7 MILES.



LEGEND:

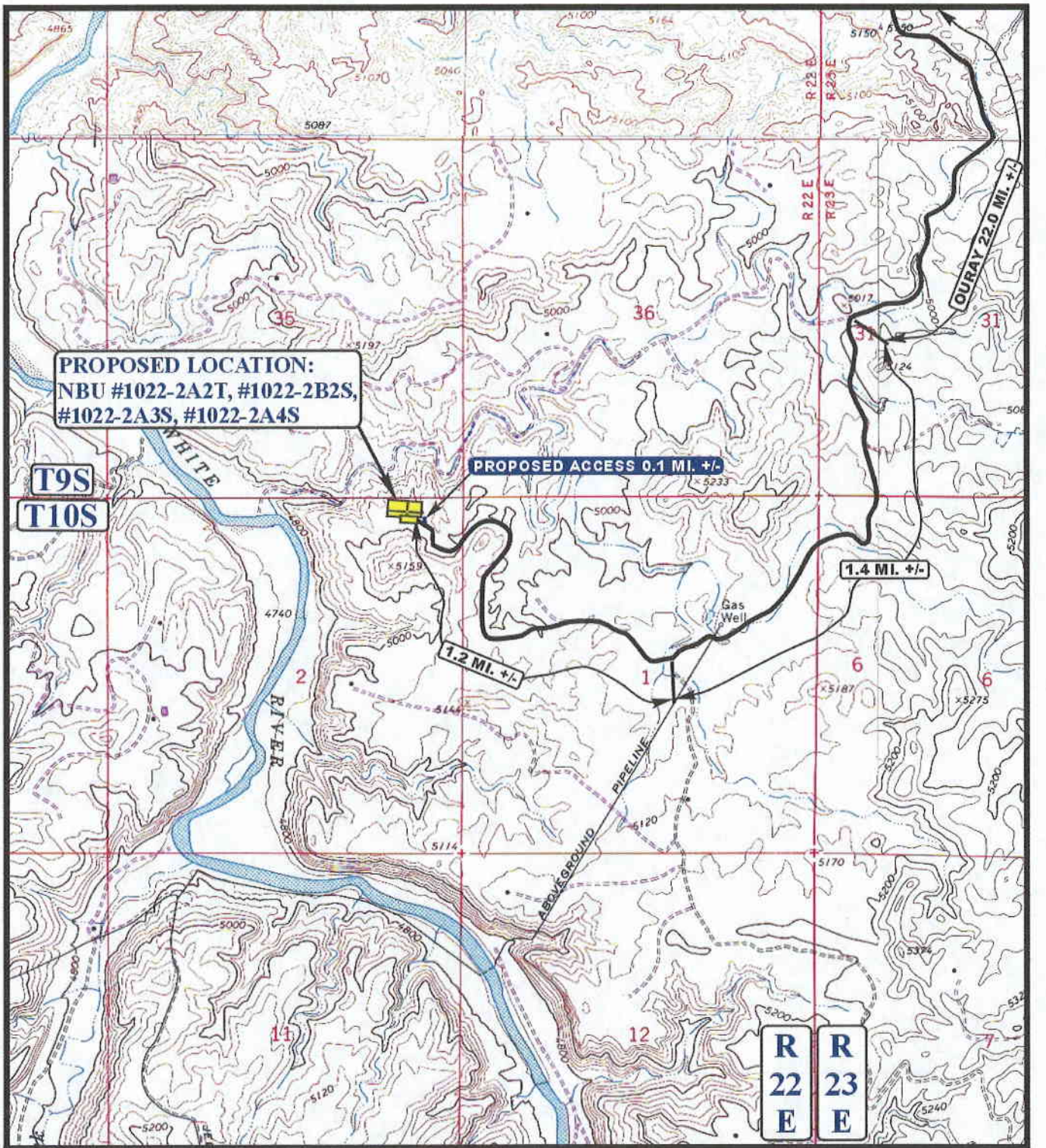
PROPOSED LOCATION

Kerr McGee Oil And Gas Company, L.P.

NBU #1022-2A2T, #1022-2B2S,
#1022-2A3S, #1022-2A4S
SECTION 2, T10S, R22E, S.L.B.&M.
NE 1/4 NE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	17 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.C.	REV: 09-17-08 J.J.		



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

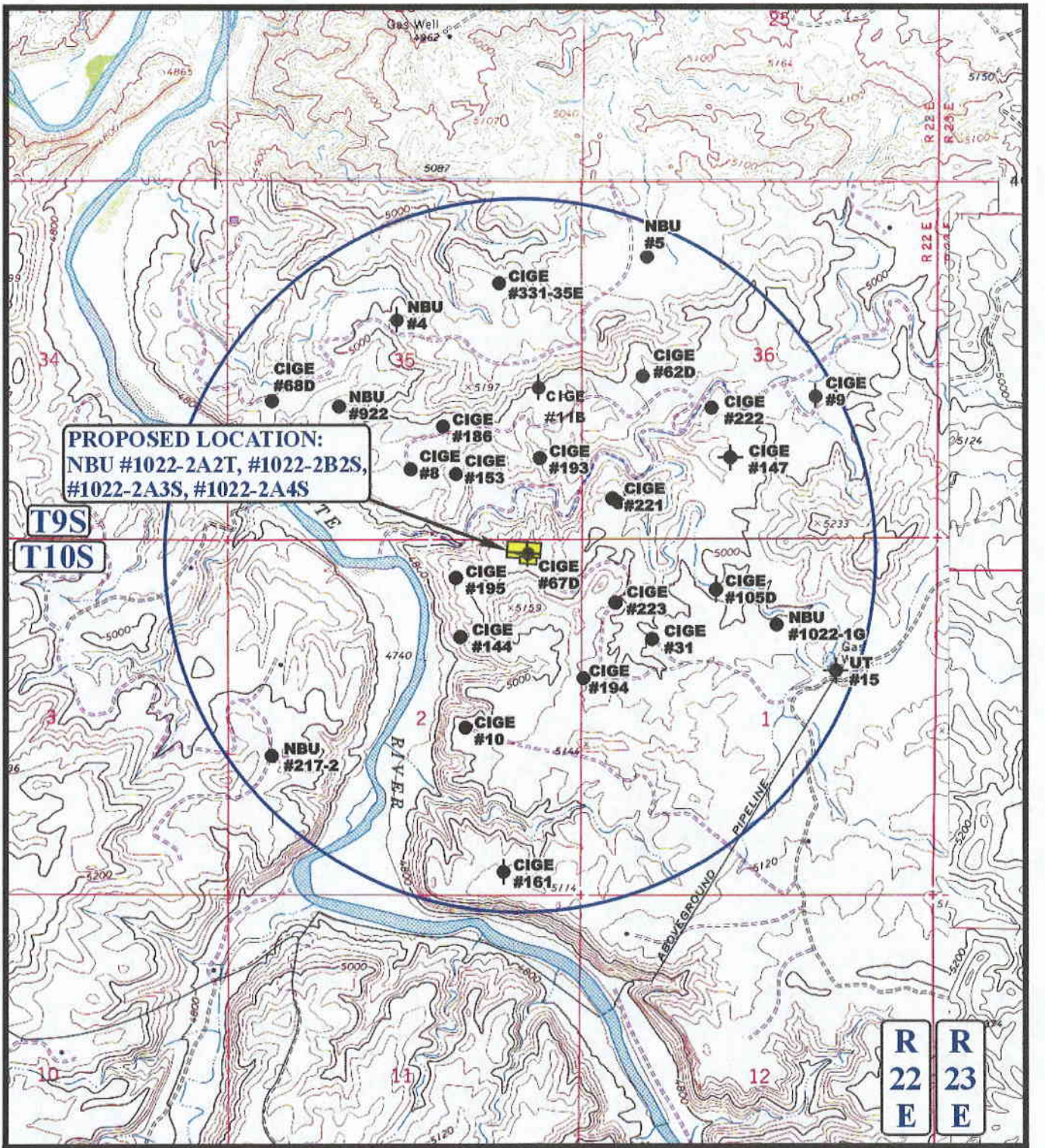
N

Kerr McGee Oil And Gas Company, L.P.

NBU #1022-2A2T, #1022-2B2S,
#1022-2A3S, #1022-2A4S
SECTION 2, T10S, R22E, S.L.B.&M.
NE 1/4 NE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	17 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.C.	REV: 09-17-08 J.J.		



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

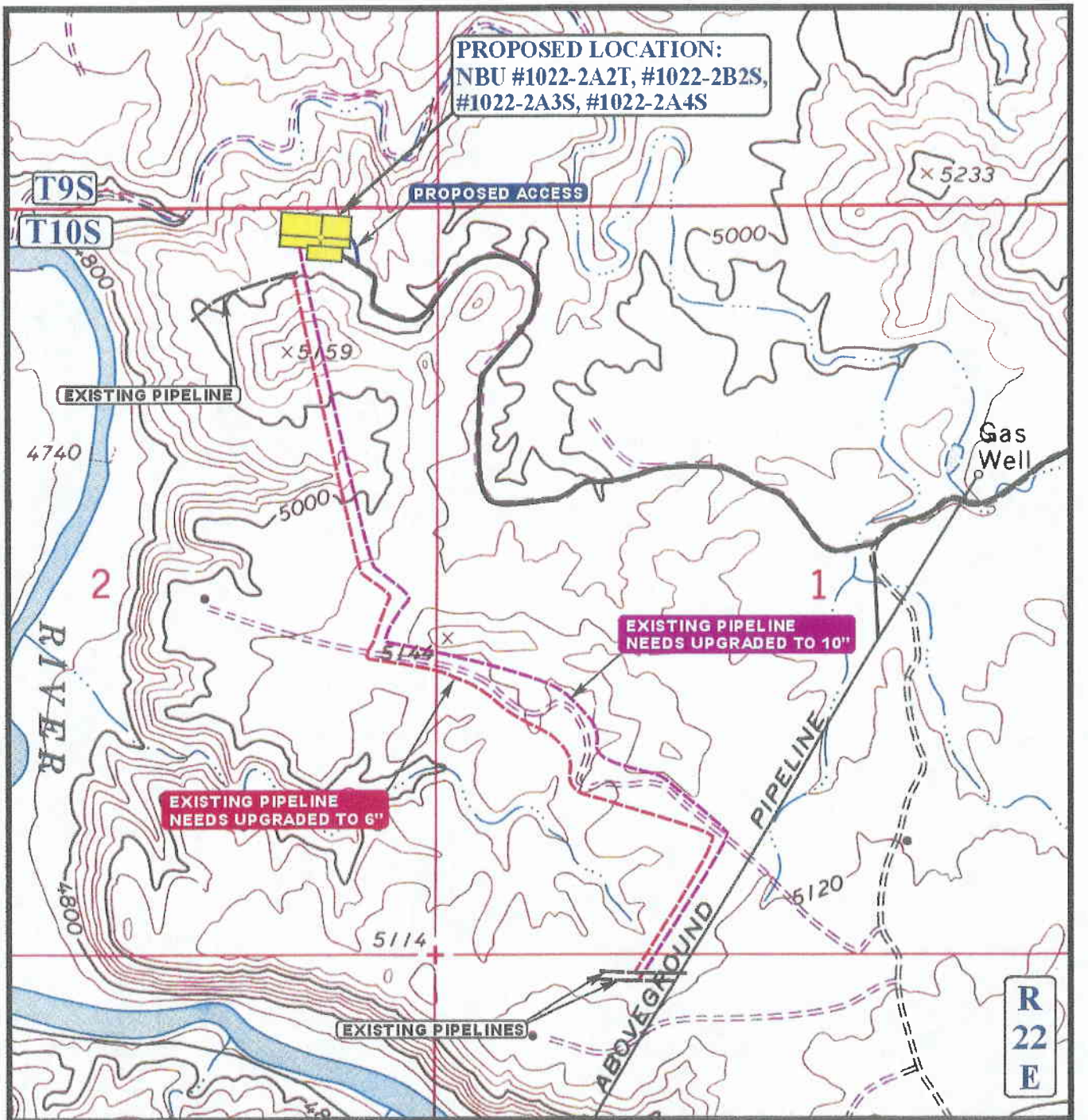
N

Kerr McGee Oil And Gas Company, L.P.

NBU #1022-2A2T, #1022-2B2S,
#1022-2A3S, #1022-2A4S
SECTION 2, T10S, R22E, S.L.B.&M.
NE 1/4 NE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	17 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.C.	REV: 09-17-08 J.J.		



APPROXIMATE TOTAL PIPELINE DISTANCE = 14,400' +/-

APPROXIMATE TOTAL PIPELINE DISTANCE = 13,400' +/-

LEGEND:

PROPOSED ACCESS ROAD
EXISTING PIPELINE
EXISTING PIPELINE UPGRADE TO 6"
EXISTING PIPELINE UPGRADE TO 10"

N

Kerr McGee Oil And Gas Company, L.P.

NBU #1022-2A2T, #1022-2B2S,
#1022-2A3S, #1022-2A4S
SECTION 2, T10S, R22E, S.L.B.&M.
NE 1/4 NE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	11 MONTH	25 DAY	08 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: D.P.	REVISED: 00-00-00		

Kerr McGee Oil And Gas Company, L.P.

NBU #1022-2A2T, #1022-2B2S, #1022-2A3S, #1022-2A4S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 2, T10S, R22E, S.L.B.&M.

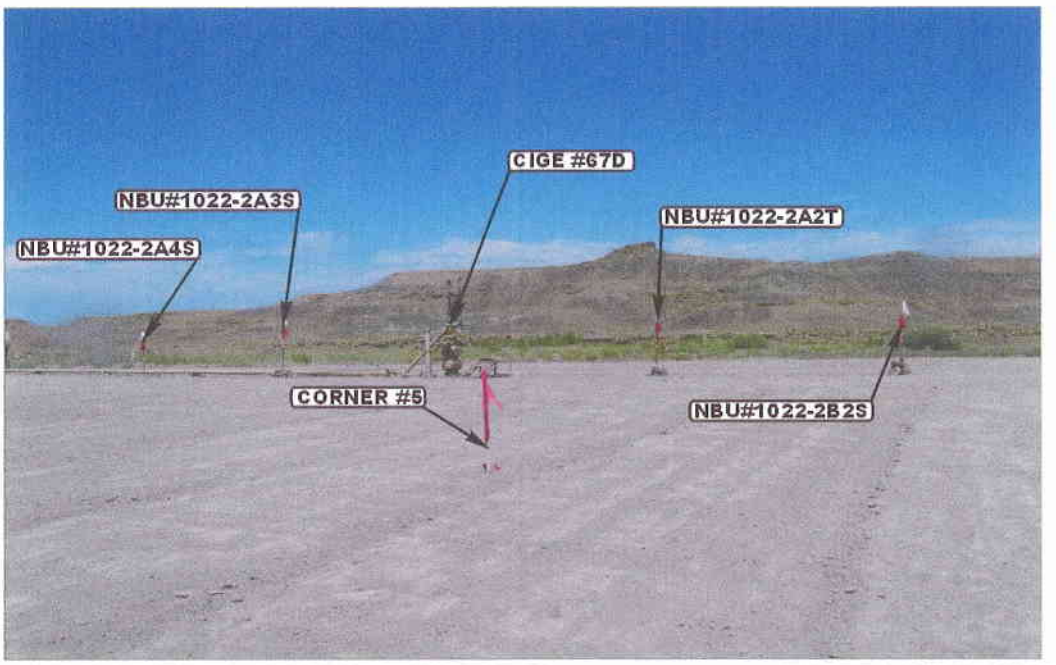


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES — CAMERA ANGLE: NORTHERLY

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS — CAMERA ANGLE: NORTHWESTERLY

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	07 MONTH	17 DAY	08 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: J.C.	REV: 09-17-08 J.J.		

Kerr-McGee Oil & Gas Onshore LP

LOCATION LAYOUT FOR

NBU #1022-2A2T, #1022-2B2S, #1022-2A3S & #1022-2A4S

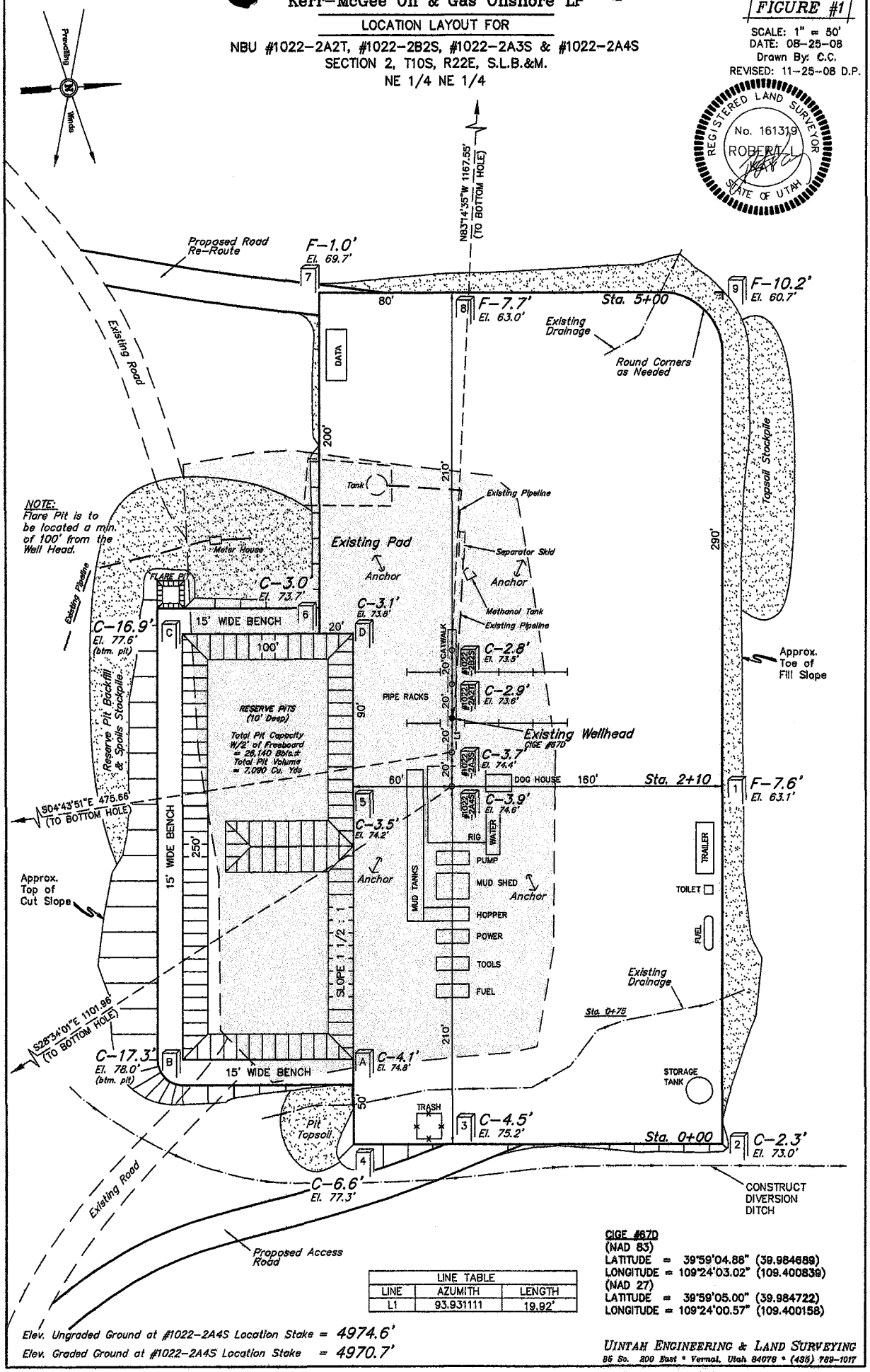
SECTION 2, T10S, R22E, S.L.B.&M.

NE 1/4 NE 1/4

FIGURE #1

SCALE: 1" = 50'
DATE: 08-25-08
Drawn By: C.C.
REVISED: 11-25-08 D.P.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L.
STATE OF UTAH



LINE TABLE		
LINE	AZUMITH	LENGTH
L1	93.931111	19.92'

CIGE #67D
(NAD 83)
LATITUDE = 39°59'04.88" (39.984689)
LONGITUDE = 109°24'03.02" (109.400839)
(NAD 27)
LATITUDE = 39°59'05.00" (39.984722)
LONGITUDE = 109°24'00.57" (109.400158)

Elev. Ungraded Ground at #1022-2A4S Location Stake = 4974.6'
Elev. Graded Ground at #1022-2A4S Location Stake = 4970.7'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

TYPICAL CROSS SECTIONS FOR

NBU #1022-2A2T, #1022-2B2S, #1022-2A3S & #1022-2A4S

SECTION 2, T10S, R22E, S.L.B.&M.

NE 1/4 NE 1/4

1" = 20' X-Section Scale

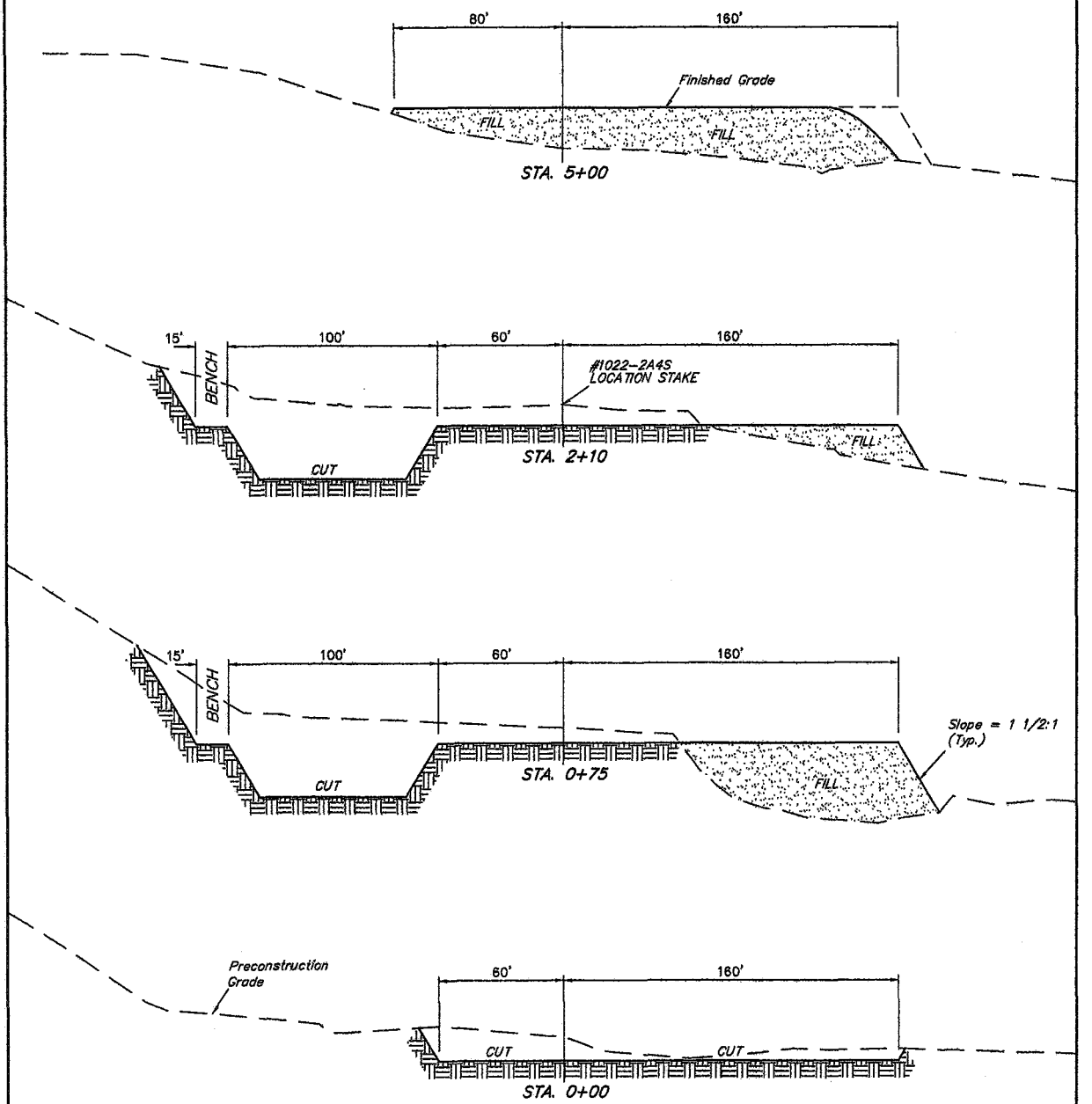
1" = 50'

DATE: 08-25-08

Drawn By: C.C.

REVISED: 11-25-08 D.P.

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. STATE OF UTAH



NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES

(6") Topsoil Stripping (New Construction Only)	=	1,520 Cu. Yds.
Remaining Location	=	19,470 Cu. Yds.
TOTAL CUT	=	20,990 CU.YDS.
FILL	=	15,920 CU.YDS.

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

EXCESS MATERIAL	=	5,070 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	5,070 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	0 Cu. Yds.

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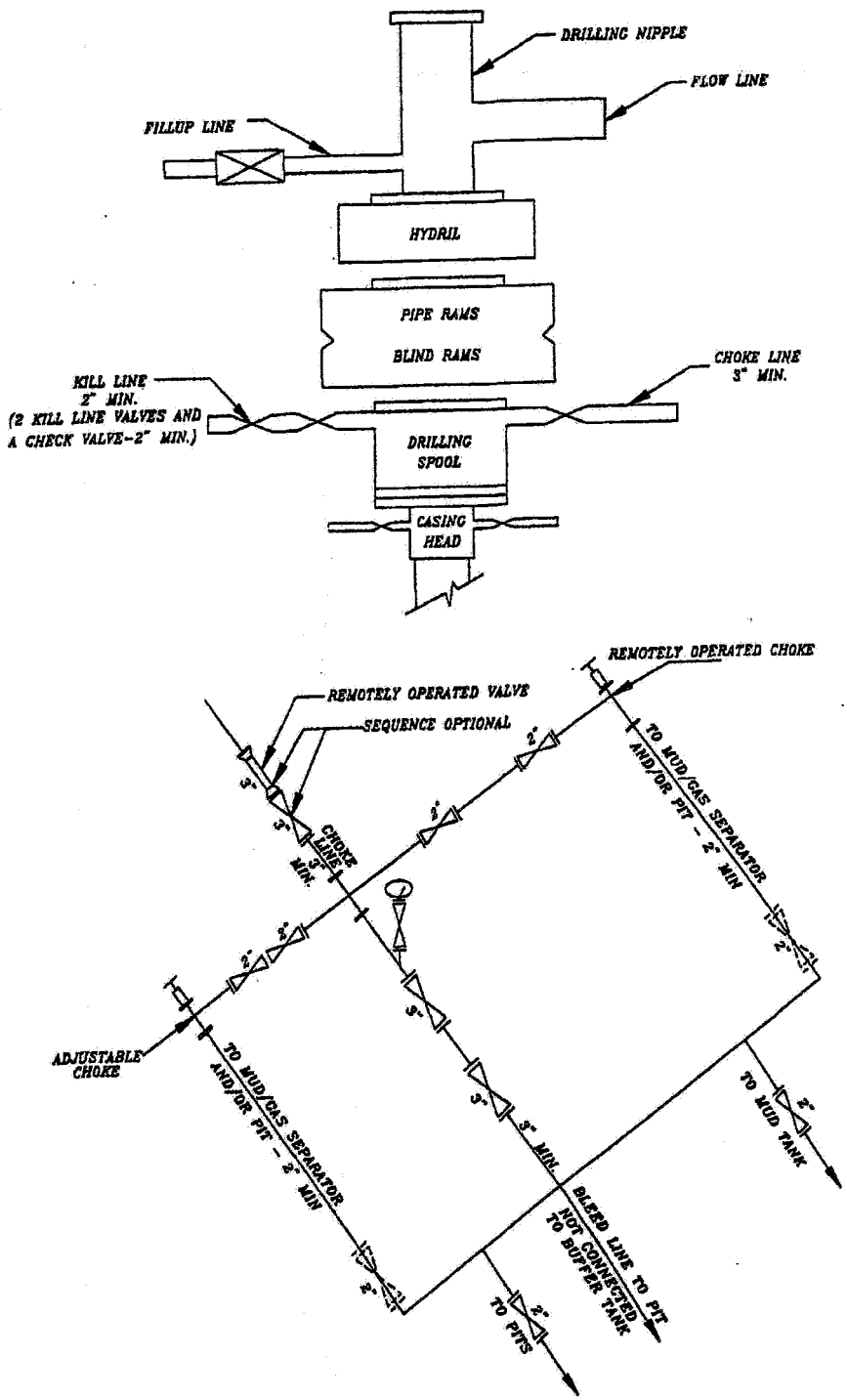
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/01/2008

API NO. ASSIGNED: 43-047-40434

WELL NAME: NBU 1022-2A2T
OPERATOR: KERR-MCGEE OIL & GAS (N2995)
CONTACT: KEVIN MCINTYRE

PHONE NUMBER: 720-929-6226

PROPOSED LOCATION:
NENE 02 100S 220E
SURFACE: 0203 FNL 0896 FEL
BOTTOM: 0203 FNL 0896 FEL
COUNTY: UINTAH
LATITUDE: 39.98467 LONGITUDE: -109.4003
UTM SURF EASTINGS: 636591 NORTHINGS: 4427071
FIELD NAME: NATURAL BUTTES (630)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	2/2/09
Geology		
Surface		

LEASE TYPE: 3 - State
LEASE NUMBER: ST ML 22651
SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD
COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat
✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. 22013542)
N Potash (Y/N)
Y Oil Shale 190-5 (B) or 190-3 or 190-13
✓ Water Permit
(No. 43-8496)
N RDCC Review (Y/N)
(Date:)
NA Fee Surf Agreement (Y/N)
NA Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.
Unit: NATURAL BUTTES
___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
✓ Drilling Unit
Board Cause No: 173-14
Eff Date: 12-2-1999
Siting: 460' fr u bdry & uncomm tract
___ R649-3-11. Directional Drill

COMMENTS: Needs Presite (11-18-08)

STIPULATIONS: 1- STATEMENT OF BASIS
2- OIL SHALE
3- Surface Csg Cmt Stip

API Number: 4304740434

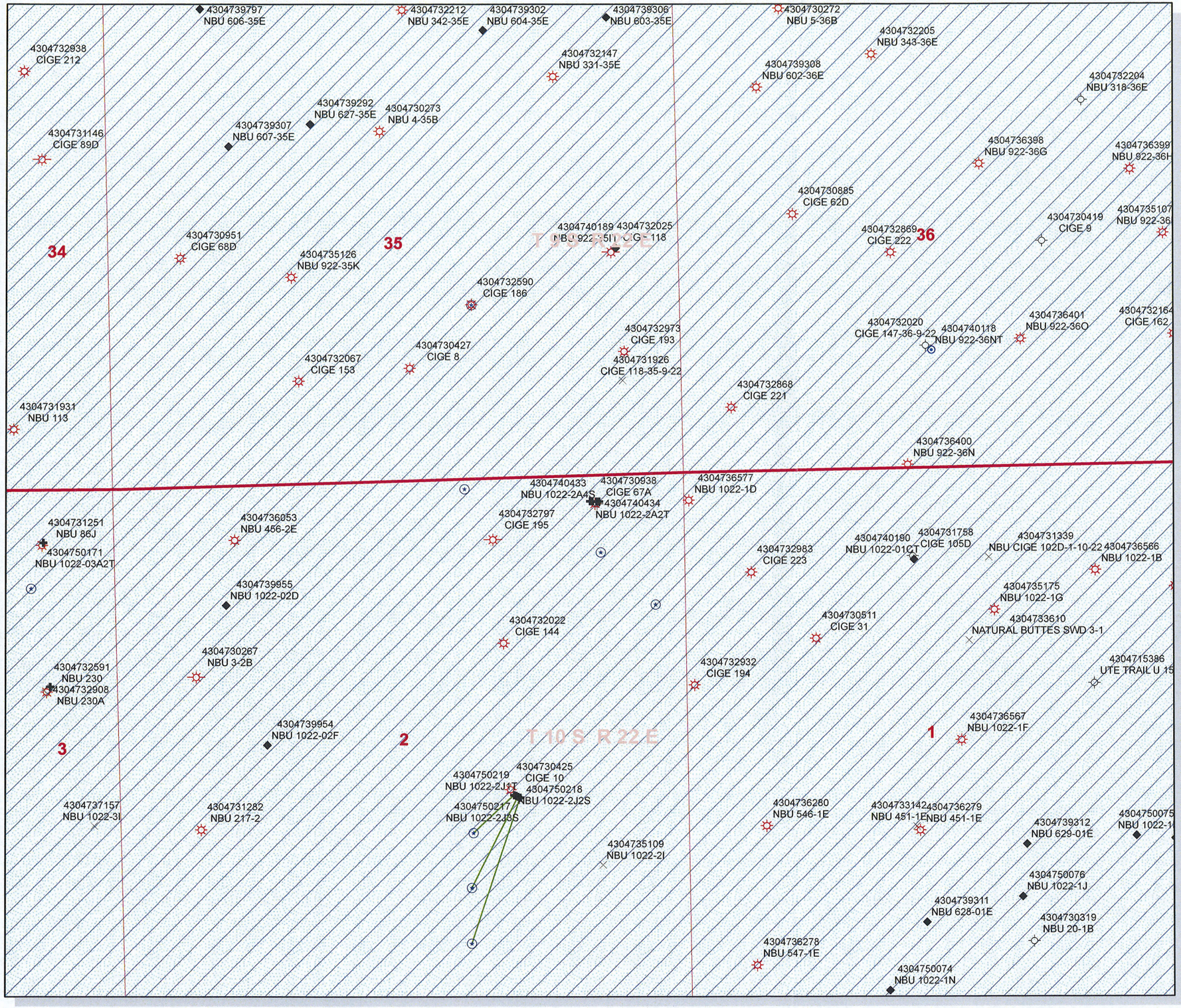
Well Name: NBU 1022-2A2T

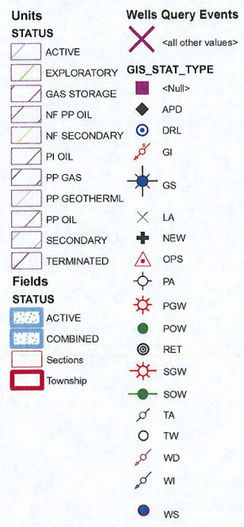
Township 10.0 S Range 22.0 E Section 02

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason





1,250 625 0 1,250 Feet

1:11,356

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
1221	43-047-40434-00-00		GW	S	No

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.	**Surface Owner-APD**	
Well Name	NBU 1022-2A2T	**Unit**	NATURAL BUTTES
Field	NATURAL BUTTES	**Type of Work**	
Location	NENE 2 10S 22E S 203 FNL 896 FEL	GPS Coord (UTM)	636591E 4427071N

Geologic Statement of Basis

Kerr McGee proposes to set 1,900' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,500'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 2. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

Brad Hill	1/13/2009
APD Evaluator	**Date / Time**

Surface Statement of Basis

The general area is in the southeast end of the Natural Buttes Unit, which contains the White River and short rugged drainages that drain into the White River. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43 air miles to the northwest. Access from Ouray, Utah is approximately 24.7 road miles following Utah State, Uintah County and oilfield development roads to the location.

The proposed pad encompasses a pad of the CIGE 67D gas well that will be significantly enlarged on three sides. The site begins at the edge of a steep north slope that leads away from a high knoll or ridge to the south. The slope continues to the north beyond the location toward a deep draw which runs to the west joining a major wash which meets the White River. The White River is about 1 mile south of the location. A drainage on the east side of the pad shows light flows which have either continued down the shallow bottom or onto the edge of the existing pad. This drainage needs to be diverted along the east side of the new pad or accept occasional light flows onto the pad. No other drainage concerns exist. The existing pad shows no stability problems and the site has no apparent concerns for constructing an enlarged pad, drilling and operating the planned wells and is the best location in the immediate area. A new Figure #1 (cut-sheet) was prepared following the pre-site visit. It lowered the surface of the existing pad approximately 2.7 feet to obtain fill material for the enlarged pad.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Pat Rainbolt of the Utah Division of Wildlife Resources also attended the pre-site. Mr. Rainbolt stated no wildlife values would be significantly affected by drilling and operating the wells at this location. He provided Jim Davis of SITLA and Ramie Hoopes of Kerr McGee a written wildlife evaluation and a copy of a recommended seed mix to be used for re-vegetating the disturbed area.

Floyd Bartlett	11/18/2008
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A double synthetic liner each with a minimum thickness of 20 mils and an appropriate thickness of felt sub-liner to cushion the liners shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 1022-2A2T
API Number 43-047-40434-0 **APD No** 1221 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 NENE **Sec** 2 **Tw** 10S **Rng** 22E 203 FNL 896 FEL
GPS Coord (UTM) 636608 4427080 **Surface Owner**

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Ramie Hoopes, Griz Oleen and Tony Kzneck (Kerr McGee), Pat Rainbolt (UDWR) and David Kay (Uintah Engineering and Land Surveying).

Regional/Local Setting & Topography

The general area is in the southeast end of the Natural Buttes Unit, which contains the White River and short rugged drainages that drain into the White River. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43 air miles to the northwest. Access from Ouray, Utah is approximately 24.7 road miles following Utah State, Uintah County and oilfield development roads to the location.

The proposed pad encompasses a pad of the CIGE 67D gas well that will be significantly enlarged on three sides. The site begins at the edge of a steep north slope that leads away from a high knoll or ridge to the south. The slope continues to the north beyond the location toward a deep draw which runs to the west joining a major wash which meets the White River. The White River is about 1 mile south of the location. A drainage on the east side of the pad shows light flows which have either continued down the shallow bottom or onto the edge of the existing pad. This drainage needs to be diverted along the east side of the new pad or accept occasional light flows onto the pad. No other drainage concerns exist. The existing pad shows no stability problems and the site has no apparent concerns for constructing an enlarged pad, drilling and operating the planned wells and is the best location in the immediate area. A new Figure #1 (cut-sheet) was prepared following the pre-site visit. It lowered the surface of the existing pad approximately 2.7 feet to obtain fill material for the enlarged pad.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Surface Use Plan

Current Surface Use
Wildlfe Habitat
Existing Well Pad

New Road Miles	Well Pad		Src Const Material	Surface Formation
0	**Width** 355	**Length** 420	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Poorly vegetated with greasewood, cheatgrass, black sagebrush, broom snakeweed, shadscale, rabbitbrush, pepper weed, halogeton and annuals.

Sheep, deer, antelope, coyote, and other small mammals and birds.

Soil Type and Characteristics

Shallow rocky sandy loam.

Erosion Issues N

Sedimentation Issues Y

A drainage needs to be diverted along the east side of the new pad or accept occasional light flows onto the pad.

Site Stability Issues N

Drainage Diverson Required Y

Berm Required? N

Erosion Sedimentation Control Required? Y

A drainage on the east side of the pad shows light flows which have either continued down the shallow bottom or onto the edge of the existing pad.

Paleo Survey Run? **Paleo Potental Observed?** N **Cultural Survey Run?** **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	<300	20
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	<10	0
Affected Populations	<10	0
Presence Nearby Utility Conduits	Not Present	0
	Final Score	35 1 **Sensitivity Level**

Characteristics / Requirements

The reserve pit is planned in an area of cut in the southeast corner of the location. Dimensions are 100' x 250' x 10' deep with 2' of freeboard. Because the length of time the reserve pit will be used and the roughness of the terrain, Kerr McGee committed to line it with a double 20-mil.liner and an appropriate thickness of felt sub-liner to cushion the rock.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 40 **Pit Underlayment Required?** Y

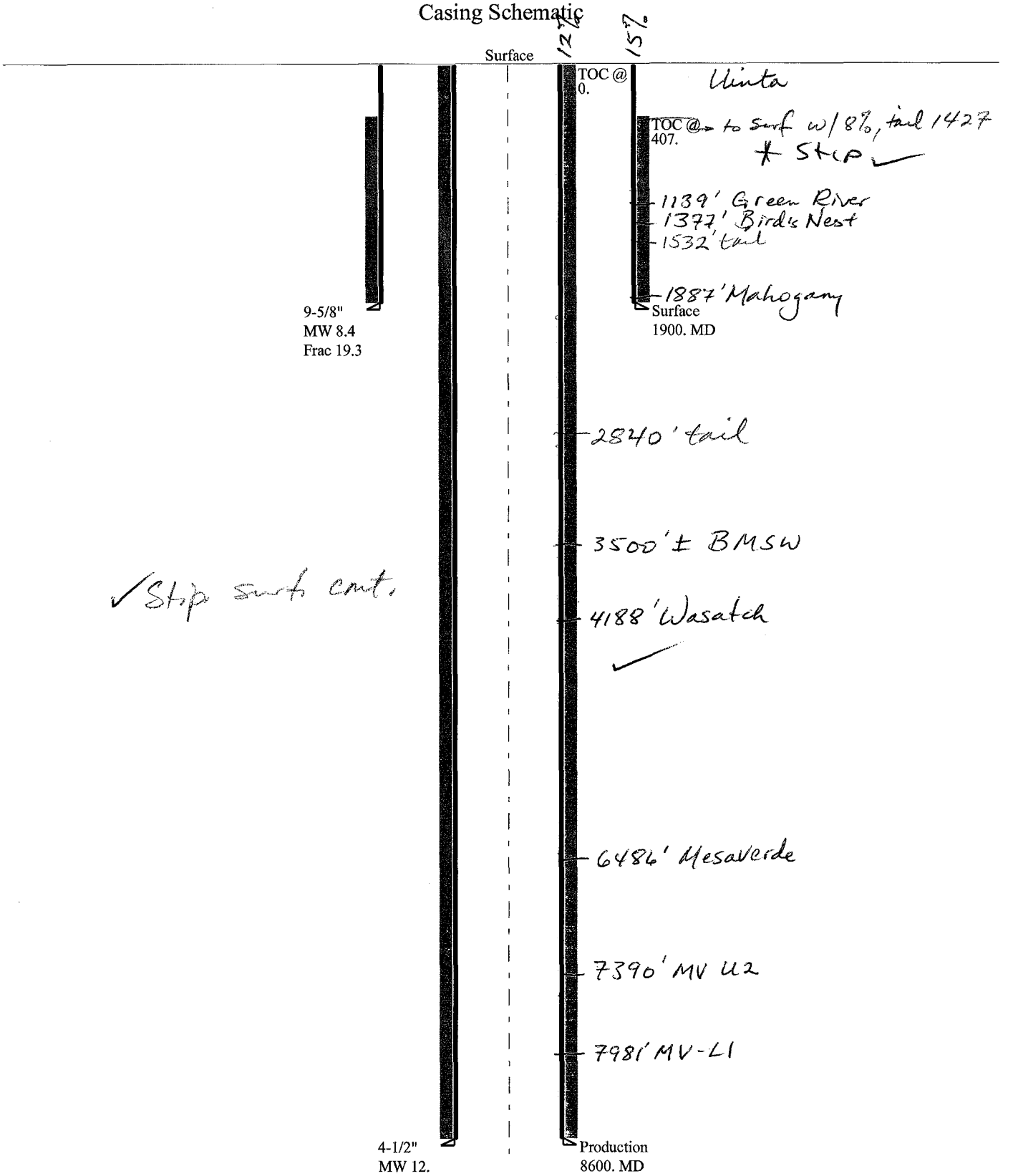
Other Observations / Comments

Floyd Bartlett
Evaluator

11/18/2008
Date / Time

43047404340000 NBU 1022-2A2T

Casing Schematic



Well name:	**43047404340000 NBU 1022-2A2T**
Operator:	**Kerr McGee Oil & Gas Onshore L.P.**
String type:	Surface
Project ID:	43-047-40434-0000
Location:	Uintah County, Utah

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,672 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,900 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,664 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 102 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,300 ft

Cement top: 407 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 8,600 ft
Next mud weight: 12.000 ppg
Next setting BHP: 5,361 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 1,900 ft
Injection pressure: 1,900 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	1900	9.625	36.00	J-55	LT&C	1900	1900	8.796	824.7

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	829	2020	2.436	1900	3520	1.85	60	453	7.56 J

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining
Phone: (801) 538-5357
FAX: (801) 359-3940
Date: January 22,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 1900 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**43047404340000 NBU 1022-2A2T**
Operator:	**Kerr McGee Oil & Gas Onshore L.P.**
String type:	Production
Project ID:	43-047-40434-0000
Location:	Uintah County, Utah

Design parameters:

Collapse

Mud weight:	12.000 ppg
Internal fluid density:	2.300 ppg

Burst

Max anticipated surface pressure:	3,469 psi
Internal gradient:	0.220 psi/ft
Calculated BHP	5,361 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor	1.125

Burst:

Design factor	1.00

Tension:

8 Round STC:	1.80 (J)
8 Round LTC:	1.80 (J)
Buttress:	1.60 (J)
Premium:	1.50 (J)
Body yield:	1.50 (B)

Tension is based on buoyed weight.
Neutral point: 7,057 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	195 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	1,500 ft
Cement top:	Surface

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	8600	4.5	11.60	I-80	LT&C	8600	8600	3.875	750.5

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4334	6360	1.468	5361	7780	1.45	82	212	2.59 J

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining
Phone: (801) 538-5357
FAX: (801) 359-3940
Date: January 15,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 8600 ft, a mud weight of 12 ppg An internal gradient of .119 psi/ft was used for collapse from TD to Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

BOPE REVIEW — Kerr-McGee NBU 1022 -2A2T — API 43-047-40434-0000

INPUT

Well Name	Kerr-McGee NBU 1022 -2A2T API 43-047-40434-0000			
	String 1	String 2		
Casing Size (")	9 5/8	4 1/2		
Setting Depth (TVD)	1900	8600		
Previous Shoe Setting Depth (TVD)	40	1900		
Max Mud Weight (ppg)	8.4	12	✓	
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3520	7780		
Operators Max Anticipated Pressure (psi)	5332	11.9 ppg	✓	

Calculations	String 1	9 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	830	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	602	NO ok Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	412	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	421	← NO Reasonable depth in area
Required Casing/BOPE Test Pressure		1900	psi
*Max Pressure Allowed @ Previous Casing Shoe =		40	psi ✓ *Assumes 1psi/ft frac gradient

Calculations	String 2	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	5366	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	4334	YES ✓
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3474	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	3892	← NO Reasonable
Required Casing/BOPE Test Pressure		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe =		1900	psi ✓ *Assumes 1psi/ft frac gradient

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

December 5, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-40444	NBU 921-10G4S	Sec 10 T09S R21E 1937 FNL 1931 FWL
	BHL	Sec 10 T09S R21E 2158 FNL 1441 FEL
43-047-40445	NBU 921-10F2S	Sec 10 T09S R21E 1877 FNL 1927 FWL
	BHL	Sec 10 T09S R21E 1373 FNL 1959 FEL
43-047-40446	NBU 921-10E3S	Sec 10 T09S R21E 1917 FNL 1929 FWL
	BHL	Sec 10 T09S R21E 2080 FNL 0406 FWL
43-047-40447	NBU 921-10F3T	Sec 10 T09S R21E 1897 FNL 1928 FWL
43-047-40448	NBU 922-29D1T	Sec 29 T09S R22E 0571 FNL 1009 FWL
43-047-40423	NBU 921-10CT	Sec 10 T09S R21E 0811 FNL 1792 FWL
43-047-40428	NBU 921-13CT	Sec 13 T09S R21E 0655 FNL 1920 FWL
43-047-40435	NBU 1022-3B4T	Sec 03 T10S R22E 1022 FNL 1751 FEL
43-047-40434	NBU 1022-2A2T	Sec 02 T10S R22E 0203 FNL 0896 FEL
43-047-40424	NBU 921-10G2S	Sec 10 T09S R21E 0835 FNL 1824 FWL
	BHL	Sec 10 T09S R21E 1340 FNL 2462 FEL
43-047-40425	NBU 921-10D2S	Sec 10 T09S R21E 0799 FNL 1776 FWL

BHL Sec 10 T09S R21E 0543 FNL 0648 FWL

43-047-40426 NBU 921-10B4S Sec 10 T09S R21E 0823 FNL 1808 FWL
BHL Sec 10 T09S R21E 0705 FNL 1929 FEL

43-047-40427 NBU 921-13G2S Sec 13 T09S R21E 0655 FNL 1940 FWL
BHL Sec 13 T09S R21E 1372 FNL 2523 FEL

43-047-40429 NBU 921-13B2S Sec 13 T09S R21E 0655 FNL 1960 FWL
BHL Sec 13 T09S R21E 0488 FNL 2541 FEL

43-047-40430 NBU 921-13D4S Sec 13 T09S R21E 0655 FNL 1900 FWL
BHL Sec 13 T09S R21E 0682 FNL 0912 FWL

43-047-40431 NBU 1022-2B2S Sec 02 T10S R22E 0202 FNL 0916 FEL
BHL Sec 02 T10S R22E 0065 FNL 2075 FEL

43-047-40432 NBU 1022-2A3S Sec 02 T10S R22E 0206 FNL 0857 FEL
BHL Sec 02 T10S R22E 0680 FNL 0820 FEL

43-047-40433 NBU 1022-2A4S Sec 02 T10S R22E 0207 FNL 0836 FEL
BHL Sec 02 T10S R22E 1175 FNL 0315 FEL

43-047-40436 NBU 1022-3A3S Sec 03 T10S R22E 1013 FNL 1734 FEL
BHL Sec 03 T10S R22E 0904 FNL 0822 FEL

43-047-40437 NBU 1022-3C1S Sec 03 T10S R22E 1040 FNL 1787 FEL
BHL Sec 03 T10S R22E 0380 FNL 2354 FWL

43-047-40438 NBU 1022-3B2S Sec 03 T10S R22E 1031 FNL 1769 FEL
BHL Sec 03 T10S R22E 0048 FNL 2516 FEL

43-047-40439 NBU 1022-24O2S Sec 24 T10S R22E 0684 FSL 2016 FEL
BHL Sec 24 T10S R22E 0830 FSL 0690 FEL

43-047-40440 NBU 1022-24P4S Sec 24 T10S R22E 0625 FSL 2002 FEL
BHL Sec 24 T10S R22E 0400 FSL 0635 FEL

43-047-40441 NBU 1022-25G2S Sec 25 T10S R22E 1768 FNL 1502 FEL
BHL Sec 25 T10S R22E 1900 FNL 2025 FEL

43-047-40442 NBU 1022-25G4S Sec 25 T10S R22E 1758 FNL 1443 FEL
BHL Sec 25 T10S R22E 2615 FNL 1955 FEL

43-047-40443 NBU 1022-25G3S Sec 25 T10S R22E 1765 FNL 1482 FEL
BHL Sec 25 T10S R22E 2250 FNL 2065 FEL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:12-5-08

From: Jim Davis
To: Bonner, Ed; Mason, Diana
Date: 12/30/2008 1:00 PM
Subject: SITLA well approvals (4 KMG, 2 Newfield)

CC: Garrison, LaVonne

The following wells have been approved by SITLA including arch and paleo clearance.

4304740431	NBU 1022-2B2S	Kerr-McGee Oil & Gas	Natural Buttes
4304740432	NBU 1022-2A3S	Kerr-McGee Oil & Gas	Natural Buttes
4304740433	NBU 1022-2A4S	Kerr-McGee Oil & Gas	Natural Buttes
4304740434	NBU 1022-2A2T	Kerr-McGee Oil & Gas	Natural Buttes

4304740420	STATE 1-36-6-20	Newfield Production Co.	Undesignated
4301334146	W DRAW ST N-32-8-16	Newfield Production Co.	Monument Butte

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 2, 2009

Kerr-McGee Oil & Gas Onshore, LP
P O Box 173779
Denver, CO 80217-3779

Re: NBU 1022-2A2T Well, 203' FNL, 896' FEL, NE NE, Sec. 2, T. 10 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40434.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
Bureau of Land Management, Vernal Field Office
SITLA

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: Kerr-McGee Oil & Gas Onshore, LP

Well Name & Number NBU 1022-2A2T

API Number: 43-047-40434

Lease: ST ML 22651

Location: NE NE **Sec.** 2 **T.** 10 South **R.** 22 East

Conditions of Approval

1. **General**

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

   The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

   - 24 hours prior to cementing or testing casing – contact Dan Jarvis
   - 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
   - 24 hours prior to spudding the well – contact Carol Daniels
   - Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
   - Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

   The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

   - Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
   - Any changes to the approved drilling plan – contact Dustin Doucet

   The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

   - Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
   - Carol Daniels at: (801) 538-5284 office
   - Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. **Reporting Requirements**

   All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

7. Surface casing shall be cemented to the surface.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **Kerr-McGee Oil & Gas Onshore, LP**

Well Name: **NBU 1022-2A2T**

API No: **43-047-40434** Lease Type: **State**

Section **02** Township **10S** Range **22E** County **Uintah**

Drilling Contractor **Pete Martin Drilling** Rig # **Bucket**

SPUDDED:

Date **04/10/09**

Time **10:00 AM**

How **Dry**

Drilling will Commence:

Reported by **Lew Weldon**

Telephone # **435-781-7060**

Date 04/14/2009 **Signed RM**

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078
Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304740196	NBU 1022-10FT		SENW	10	10S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	4/11/2009			4/16/09	
Comments: MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 04/11/2009 AT 0900 HRS. WSMVD							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738488	NBU 1022-3K-4T		NESW	3	10S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	4/9/2009			4/16/09	
Comments: MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 04/09/2009 AT 1000 HRS. WSMVD							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304740434	NBU 1022-2A2T		NENE	2	10S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	4/10/2009			4/16/09	
Comments: MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 04/10/2009 AT 1000 HRS. WSMVD							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO
Name (Please Print)
Signature
REGULATORY ANALYST
Title
4/14/2009
Date

RECEIVED
APR 14 2009
DIV. OF OIL, GAS & MINING

(5/2000)

API Well No: 43047404340000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2A2T

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047404340000

3. ADDRESS OF OPERATOR: PO BOX 173779 , DENVER , CO, 802173779

PHONE NUMBER: (720)929-6485

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0203 FNL 0896 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 4/16/2009	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Surface casing patch

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This well is having the surface casing patched as detailed in the attached casing patch procedure. During the drilling of the surface casing for the adjacent well (NBU 1022-2B2S), the drill bit was allowed to drift naturally. It drifted toward, and ran into, the already set casing for this well. This situation was discussed with Dustin Doucet of UDOGM and the undersigned on 04/20/09 around 11:15 am. Mr. Doucet verbally approved this casing patch, pending follow-up with this written notification and details. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: April 27, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE

SIGNATURE	DATE
N/A	4/22/2009

RECEIVED April 22, 2009

Kerr-McGee Oil & Gas Onshore, LP
NBU 1022-2A2T
203’ FNL 896’ FEL (NE/4 NE/4)
Section 2 T10S R22E

Uintah County, UT

Mineral Lease: ML 22651

API Number: 43-047-40434

Casing Patch Procedure:

1. RU WOR on NBU 1022-2A2T. TIH with PDC, 6" mill, 8-3/4" mill, 6" mill and 2-7/8" tubing to 1480'. Rotate milling assembly and RIH slowly. Note location of torque and drag. Run 8-3/4" mills to 1640' (40' below the TD of the NBU 1022-2B2S).

2. TOH.

3. PU Weatherford casing patch. TIH across identified damaged casing. Set the casing patch according to Weatherford procedure (the length of the patch will be determined by length of damaged section).

4. PU and pressure test casing patch to 960 psi (based on expected 16.0 ppg leakoff at the surface casing shoe) ((16.0 + 0.5) - 8.34) (0.052) (2257) = 960 psi.

5 POH LD workstring.

6 Secure well.

The surface hole on the NBU 1022-2A2T was drilled to 2340' and the surface casing was run to 2257'. While picking up the landing joint, the 9-5/8", 36 ppf, J-55, LTC casing became stuck and was set at this depth. Because of losses in the Bird's Nest, cement could not be circulated to surface. 350 sks of 15.8 ppg Cl G cement was pumped for the primary cement job. This was followed by three top jobs with 15.8 ppg Cl G cement. The first was 100 sks, the second was 150 sks, and the third was 300 sks of cement. After the third job, the cement stayed static at the surface. The rig moved on location on 4/11/09 and finished cementing the surface casing on 4/16/09.

API Well No: 43047404340000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2A2T

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047404340000

3. ADDRESS OF OPERATOR: PO BOX 173779 , DENVER , CO, 802173779

PHONE NUMBER: (720)929-6485

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0203 FNL 0896 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 4/16/2009	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Surface casing patch

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This well is having the surface casing patched as detailed in the attached casing patch procedure. During the drilling of the surface casing for the adjacent well (NBU 1022-2B2S), the drill bit was allowed to drift naturally. It drifted toward, and ran into, the already set casing for this well. This situation was discussed with Dustin Doucet of UDOGM and the undersigned on 04/20/09 around 11:15 am. Mr. Doucet verbally approved this casing patch, pending follow-up with this written notification and details. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: April 27, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE

SIGNATURE	DATE
N/A	4/22/2009

RECEIVED April 22, 2009

Kerr-McGee Oil & Gas Onshore, LP
NBU 1022-2A2T
203’ FNL 896’ FEL (NE/4 NE/4)
Section 2 T10S R22E

Uintah County, UT

Mineral Lease: ML 22651

API Number: 43-047-40434

Casing Patch Procedure:

1. RU WOR on NBU 1022-2A2T. TIH with PDC, 6" mill, 8-3/4" mill, 6" mill and 2-7/8" tubing to 1480'. Rotate milling assembly and RIH slowly. Note location of torque and drag. Run 8-3/4" mills to 1640' (40' below the TD of the NBU 1022-2B2S).

2. TOH.

3. PU Weatherford casing patch. TIH across identified damaged casing. Set the casing patch according to Weatherford procedure (the length of the patch will be determined by length of damaged section).

4. PU and pressure test casing patch to 960 psi (based on expected 16.0 ppg leakoff at the surface casing shoe) ((16.0 + 0.5) - 8.34) (0.052) (2257) = 960 psi.

5 POH LD workstring.

6 Secure well.

The surface hole on the NBU 1022-2A2T was drilled to 2340' and the surface casing was run to 2257'. While picking up the landing joint, the 9-5/8", 36 ppf, J-55, LTC casing became stuck and was set at this depth. Because of losses in the Bird's Nest, cement could not be circulated to surface. 350 sks of 15.8 ppg Cl G cement was pumped for the primary cement job. This was followed by three top jobs with 15.8 ppg Cl G cement. The first was 100 sks, the second was 150 sks, and the third was 300 sks of cement. After the third job, the cement stayed static at the surface. The rig moved on location on 4/11/09 and finished cementing the surface casing on 4/16/09.

API Well No: 43047404340000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2A2T

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047404340000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0203 FNL 0896 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/1/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Change to pressure test

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests a change to the surface casing pressure test. The NBU 1022-2B2S hit this well during surface casing drilling and put a hole in the 9-5/8" casing. The casing was patched and cement was spotted behind the pipe. The size of the hole is unknown, and the patch integrity decreases with an increase in hole size. Kerr-McGee would like to reduce the casing test pressure to leak-off at the shoe with water plus 1.0 ppg or 670 psi. These are the calculations (0.68 * 2257)/(.052/2257) = 13.1 ppg (fracture at the shoe) ((13.1 + 1.0) - 8.4) * 0.052 * 2257 = 670 psi Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: June 30, 2009

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Kathy Schneebeck-Dulnoan	720 929-6007	Staff Regulatory Analyst
SIGNATURE N/A		**DATE** 6/29/2009

RECEIVED June 29, 2009

API Well No: 43047404340000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2A2T

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047404340000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0203 FNL 0896 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/24/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Temp. Poly Lines

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr McGee Oil & Gas requests to use water from the White River using the extraction point owned by RNI/Dalbo Inc. Water Permit #: 49-2306. The water will be pumped through poly lines to the Cige 195 where tanks will be staged to store the volume of water needed before it is pumped through the poly lines to the multi pad well for the NBU 1022-2B2SX, 2B2S, 2A2T, 2A3S, 2A4S. The water will be used for the completion process of these wells and will envolve the Frac Factory that was approved 6/8/09.

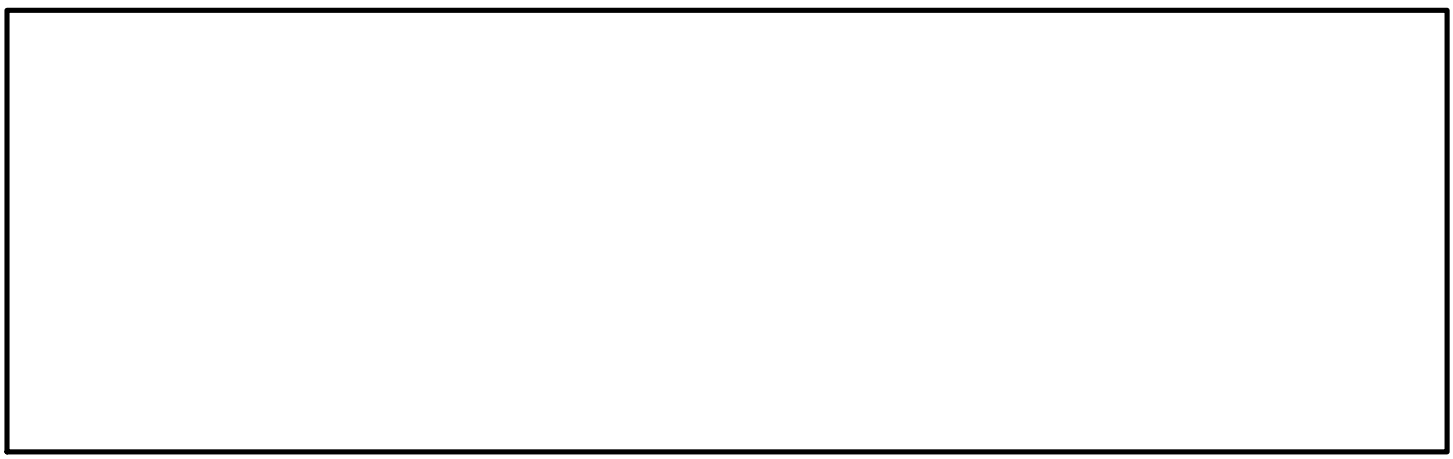
Accepted by the Utah Division of Oil, Gas and Mining

Date: August 25, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Ramey Hoopes	435 781-7003	Sr. Land Specialist
SIGNATURE N/A		**DATE** 8/18/2009

RECEIVED August 18, 2009



RECEIVED August 18, 2009

API Well No: 43047404340000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2A2T

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047404340000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0203 FNL 0896 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/18/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SPUD REPORT Date of Spud:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ DRILLING REPORT Report Date:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Refurb pit/frac factory

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, LP is requesting to refurb the existing pit on this pad for completion operations. The refurb pit will be relined per the requirements in the COA of the APD. Upon completion of the wells on this pad KMG is also requesting to utilize this pit as a staging pit to be utilized for other completion operations in the area. There will be 2 - 400 bbl upright skim tanks placed on location. The trucks will unload water into these tanks before the water is placed into the refurbed pit. The purpose of the skim tanks is to collect any hydro-carbons that may have been associated with the other completion operations before releasing into the pit. We plan to keep this pit open for 1 year. During this time the attached well location completion fluids will be recycled in this pit and utilized for other frac jobs in the area.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 14, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Raleen White	720 929-6666	Sr. Regulatory Analyst
SIGNATURE N/A		**DATE** 8/18/2009

RECEIVED August 18, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047404340000

A synthetic liner with a minimum thickness of 30 mils shall be properly installed and maintained in the pit.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: September 14, 2009

By:

API Well No: 43047404340000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 22651

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-2A2T

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047404340000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0203 FNL 0896 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 02 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 10/10/2009	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 10/10/2009 AT 10:40 A.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
October 12, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 10/12/2009

RECEIVED October 12, 2009

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: PROPETRO/, ENSIGN 145/145, MILES 4/4
Event: DRILLING	Start Date: 4/11/2009	End Date: 7/11/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/11/2009	11:30 - 0:00	12.50	DRLSUR	02		P		MOVE IN AND RIG UP AIR RIG SPUD WELL @ 1130 HR 4/11/09 D/F 40'-990' W/ AIR MIST @ REPORT TIME
4/12/2009	0:00 - 12:00	12.00	DRLSUR	02		P		RIG DRILLED TO 1170' HIT SOME WATER PREP TO TRIP FOR TRI CONE
	12:00 - 14:00	2.00	DRLSUR	06		P		TRIP OUT OF HOLE LAY DOWN HAMMER RIH W/ TRI CONE
	14:00 - 0:00	10.00	DRLSUR	02		P		RIG DRILLING AHEAD HIT TRONA WATER @ 1390' CIRCULATING WITH SKID PUMP D/F 1390'-1380' @ REPORT TIME
4/13/2009	0:00 - 12:00	12.00	DRLSUR	02		P		RIG DRILLING AHEAD CIRCULATING WITH SKID PUMP NO RETURNS 1580'
	12:00 - 0:00	12.00	DRLSUR	02		P		RIG DRILLING AHEAD CIRCULATING WITH SKID PUMP NO RETURNS 1830'
4/14/2009	0:00 - 12:00	12.00	DRLSUR	02		P		RIG DRILLING AHEAD DRILLING W/FLUID NO RETURNS 1920'
	12:00 - 0:00	12.00	DRLSUR	02		P		RIG DRILLING AHED DRILLING W/FLUID NO RETURNS 2130'
4/15/2009	0:00 - 12:00	12.00	DRLSUR	02	A	P		RIG DRILLING AHEAD DRILLING W/ FLUID NO RETURNS 2250'
	12:00 - 17:00	5.00	DRLSUR	02	A	P		RIG T/D @ 2340' CONDITION HOLE
	17:00 - 18:00	1.00	DRLSUR	10	A			RUN SURVEY 1.95 DEG
	18:00 - 19:00	1.00	DRLSUR	06	D	P		TRIP DP OUT OF HOLE
	19:00 - 22:00	3.00	DRLSUR	12	C	P		RUN 2257' OF 9 5/8 36# J-55 CSG PICK UP LAST JNT TAGGED UP RIG UP TO CIRCULATE CSG DOWN
	22:00 - 23:30	1.50	DRLSUR	05	D	X		WAS UN ABLE TO WASH CSG DOWN LAY LAST JNT DOWN AND LAND CSG @ 2257'
	23:30 - 0:00	0.50	DRLSUR	01	E	P		RIG DOWN AIR RIG
4/16/2009	0:00 - 2:00	2.00	DRLSUR	12		P		CEMENT SURFACE WITH 350 SKS @ 15.8# 1.15 5.0 GAL/SK NO RETURNS THRU OUT JOB 200 PSI LIFT LAND PLUG W/950 PSI FLOATS HELD
	2:00 - 2:30	0.50	DRLSUR	12		P		1ST TOP JOB 100 SKS DOWN BS WOC
	2:30 - 4:30	2.00	DRLSUR	12		P		2ND TOP JOB 150 SKS DOWN BS WOC
	4:30 - 7:00	2.50	DRLSUR	12		P		3RD TOP JOB 300 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
	7:00 - 7:00	0.00	DRLSUR					NO VISIBLE LEAKS PIT 20% FULL WORT
4/22/2009	0:00 - 7:00	7.00	WO/REP	21	C	S		WAIT FOR DAYLIGHT TO START OPERATIONS
	7:00 - 11:00	4.00	WO/REP	21	E	S		DRILL AND INSTALL 8 DEAD MAN ANCHORS NEEDED FOR WORK OVER RIG.
	11:00 - 12:30	1.50	WO/REP	01	B	S		RIG UP WORK MILES WELL SERVICE.
	12:30 - 18:30	6.00	WO/REP	06	A	S		P/U 6" PONY COLLAR, P/U 8.85" STRING MILL, XO, 6- 4 3/4" COLLARS, XO. P/U 45 2 7/8" PH 6 8.7# HYRDRILL TUBING, TAG BAD CSG @ 1580'. LD 1 JT.
	18:30 - 0:00	5.50	WO/REP	21	C	S		WAIT FOR DAYLIGHT
4/23/2009	0:00 - 7:00	7.00	WO/REP	21	C	S		WAIT FOR DAY LIGHT
	7:00 - 13:00	6.00	WO/REP	19	A	S		RIG UP POWER SWIVEL, REVERSE CIRC. 2 BBLS/MIN, MILL CSG F/ 1580'-1606', MILLED TIGHT 1580', EASY 25', TIGHT 1606'. ROTATED KELLY DOWN WITH NO TORQUE. SLIDE DOWN TO 1721'. NOTHING TAGGED. RIG DOWN POWER SWIVEL. NO CIRC. THROUGH OUT.

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: PROPETRO/, ENSIGN 145/145, MILES 4/4
Event: DRILLING	Start Date: 4/11/2009	End Date: 7/11/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:00 - 14:30	1.50	WO/REP	11	E	S		R/U LOGGERS, RAN CCL 1700'- 1400'. HOLE IN CSG 1564'- 1588'. RAN CBL F/ 2142'- 150'. FLUID LEVEL IN WELL 150'
	14:30 - 15:30	1.00	WO/REP	21	D	S		WAIT ON WEATHERFORD FOR CSG PATCH SETTING TOOL
	15:30 - 17:00	1.50	WO/REP	06	A	S		P/U WEATHERFOR PATCH SETTING TOOL.
	17:00 - 0:00	7.00	WO/REP	21	C	S		WAIT ON DAYLIGHT
4/24/2009	0:00 - 7:00	7.00	WO/REP	21	C	S		WAIT FOR DAYLIGHT
	7:00 - 9:00	2.00	WO/REP	12	C	S		P/U CSG PATCH.
	9:00 - 11:30	2.50	WO/REP	12	C	S		TRIP IN HOLE W/ CSG PATCH. TOP OF CSG PATCH 1550'.
	11:30 - 13:30	2.00	WO/REP	12	C	S		1 K DRAG THROUGH BAD CSG 1K DRAG, PRESSURE UP 4500 PSI, HAD HESITATION @ 2000 PSI. PULL OUT OF PATCH 40-53K, IRON OUT PATCH 2K UP DOWN EXCEPT THROUGH COLLAR WHICH PULLED 5K UP DOWN.
	13:30 - 15:30	2.00	WO/REP	06	A	S		TRIP OUT W/ PATCH SETTING TOOLS AND LOAD OUT.
	15:30 - 17:00	1.50	WO/REP	06	A	S		P/U 7 7/8" BIT AND TRIP IN HOLE. TAG 2165'.
	17:00 - 18:00	1.00	WO/REP	05	F	S		INSTALL ROT HEAD AND CIRC BOTTOMS UP 160 BBLS HOLE CIRC FULL RETURNS
	18:00 - 19:00	1.00	WO/REP	06	A	S		TRIP OUT TO 1536'. FILL HOLE AND FLUID LEVEL STAYING AT TOP OF HOLE
	19:00 - 0:00	5.00	WO/REP	21	C	S		WAIT ON DAYLIGHT
4/25/2009	0:00 - 7:00	7.00	WO/REP	21	C	P		WAIT FOR DAYLIGHT
	7:00 - 8:30	1.50	WO/REP	06	A	P		LAYDOWN 1500' 2-7/8 TUBING , SUB, XO'S RELEASE RIG. 08:30 04/25/2009
7/3/2009	6:00 - 7:30	1.50	MIRU	01	C	P		SKID THE RIG FROM THE NBU 1022-2A3S.
	7:30 - 10:00	2.50	MIRU	01	E	P		RIG DOWN ELECTRICAL, PITS PUMPS AND ALL OF THE BACK YARD.
	10:00 - 16:00	6.00	MIRU	01	A	P		HELD DRIVER / CREW SAFETY MEETING, MOVE THE BACK YARD FORWARD 60' TO THE THIRD WELL. RELEASE TRUCKS @ 16:00 HRS.
	16:00 - 23:30	7.50	MIRU	01	B	P		RIG UP THE BACK YARD, ELECTRICAL, CAT WALK, FLARE LINES, ETC. LEVEL THE SUB.
	23:30 - 0:00	0.50	MIRU	15	A	P		HELD SAFETY MEETIN. START TESTING THE BOP'S.
7/4/2009	0:00 - 3:30	3.50	DRLPRO	15	A	P		TEST PIPE RAMS, BLIND RAMS, FLOOR VALVES, CHOKE MANIFOLD AND ALL RELATED VALVES TO 250 AND 5000 PSI. TEST HYDRIL TO 250 AND 2500 PSI. TEST CASING TO 700 PSI.
	3:30 - 4:00	0.50	DRLPRO	14	B	P		NSTALL WEAR BUSHING.
	4:00 - 5:00	1.00	DRLPRO	06	A	P		MAKE UP MOTOR AND BIT ON BHA.
	5:00 - 5:30	0.50	DRLPRO	08	B	Z		REPAIR HYDRAULIC LEAK ON THE BLOCK LOCK.
	5:30 - 8:30	3.00	DRLPRO	06	A	P		FINISH PU FMH555 PDC, MM 1.5 DEG BH, 7/8 LOBE, 5.0 STAGE AND MWD EQUIP. ON 768' OF HWDP BHA, ORIENT MWD AND TIH WITH SAME TO 1900'.
	8:30 - 11:00	2.50	DRLPRO	09	A	P		SLIP AND CUT DL 70'
	11:00 - 11:30	0.50	DRLPRO	06	A	P		TIH TO 2230'
	11:30 - 12:00	0.50	DRLPRO	02	F	P		DRILL SHOE TRACK
	12:00 - 14:00	2.00	DRLPRO	02	D	P		DRILL 2330'-2440' (100')
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:30 - 15:30	1.00	DRLPRO	08	A	Z		REPAIR / REBOOT PICO SYSTEM AND RECALIBRATE BLOCKS.

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: PROPETRO/, ENSIGN 145/145, MILES 4/4
Event: DRILLING	Start Date: 4/11/2009	End Date: 7/11/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILL/SLIDE 2440'-3045' (605') 71.1'/HR. 18-22K WOB, 145 BIT RPM. PP 1430-1650, 500 GPM, DIFF 200-250.
7/5/2009	0:00 - 11:00	11.00	DRLPRO	02	D	P		DRILL 3045'-4023' (978') 88.9'/HR. 18-24K WOB, 150 BIT RPM. PP 1250-1650, 500 GPM, DIFF 200-350.
	11:00 - 11:30	0.50	DRLPRO	07	A	P		SERVICE RIG.
	11:30 - 13:30	2.00	DRLPRO	02	D	P		DRILL 4023'-4157' (134') 67'/HR. 18-26K WOB, 150 BIT RPM. PP 1250-1650, 500 GPM, DIFF 200-350. P-RATE FELL TO 18' TO 30'/HR. LAST 1 HR.
	13:30 - 14:00	0.50	DRLPRO	05	C	P		CIRCULATE, PUMP PILL
	14:00 - 16:00	2.00	DRLPRO	06	A	P		POOH FOR BIT #2 DUE TO SLOW PENETRATION RATE.
	16:00 - 18:00	2.00	DRLPRO	08	B	Z		IRON DERRICK MAN HYDRAULIC FLUID OVERHEATED, WAIT TO COOL. REPROGRAM.
	18:00 - 19:00	1.00	DRLPRO	06	A	P		FINISH OUT OF HOLE, CHANGE BITS, PU NEW FMHX555 AND TIH WITH SAME.
	19:00 - 19:30	0.50	DRLPRO	08	A	P		TIGHTEN BRACE ON TOP DRIVE. CHECK HYDRAULIC PSI.
	19:30 - 22:00	2.50	DRLPRO	06	A	P		FINISH TRIP IN THE HOLE
	22:00 - 0:00	2.00	DRLPRO	02	D	P		DRILL 4157'-4350' (192') 96.5'/HR. 10-12K WOB, 150 BIT RPM. PP 1250-1650, 500 GPM, DIFF 300-400
7/6/2009	0:00 - 10:30	10.50	DRLPRO	02	D	P		DRILL 4350'-5425' (1075') 102.3'/HR. 10-15K WOB, 150 BIT RPM. PP 1250-1650, 500 GPM, DIFF 300-400
	10:30 - 11:00	0.50	DRLPRO	07	A	P		SERVICE RIG, VISUALLY INSPECT DERRICK
	11:00 - 21:00	10.00	DRLPRO	02	D	P		DRILL 5425'-5985' (560') 56'/HR. 12-20K WOB, 150 BIT RPM. PP 1250-1650, 500 GPM, DIFF 300-400
	21:00 - 21:30	0.50	DRLPRO	08	B	Z		BLACK OUT RIG, RECALIBRATE PICO, TOP DRIVE, HYDRAULIC PUMP WILL NOT COME ON AUTOMATI, ONLY MANUAL.
	21:30 - 0:00	2.50	DRLPRO	02	D	P		DRILL 5985'-6112' (127') 50.8'/HR. 15-20K WOB, 150 BIT RPM. PP 1250-1650, 500 GPM, DIFF 300-400
7/7/2009	0:00 - 9:00	9.00	DRLPRO	02	D	P		ROTATE 6112'-6638' (526') 58.4'/HR 15-20K WOB, 150 BIT RPM. PP 2000-2350, 500 GPM, DIFF 300-400
	9:00 - 9:30	0.50	DRLPRO	02	D	P		SLIDE 6638'-6656' (18') 36'/HR. 15-18K WOB, TFO "0"
	9:30 - 10:30	1.00	DRLPRO	02	D	P		ROTATE 6638'-6732' (94') 94'/HR. 15-20K WOB, 150 BIT RPM. PP 2150-2450, 500 GPM, DIFF 300-400
	10:30 - 11:00	0.50	DRLPRO	07	A	P		SERVICE RIG.
	11:00 - 20:00	9.00	DRLPRO	02	D	P		ROTATE 6732'-7192' (460') 51.1'/HR. 15-20K WOB, 150 BIT RPM. PP 2150-2500 GPM, DIFF 300-400
	20:00 - 21:00	1.00	DRLPRO	02	D	P		SLIDE 7192'-7210' (18') TFO "0"
	21:00 - 23:00	2.00	DRLPRO	02	D	P		ROTATE 7192'-7345' (153') 76.5'/HR. 15-20K WOB, 150 BIT RPM. PP 2350-2700 GPM, DIFF 300-400
	23:00 - 0:00	1.00	DRLPRO	08	A	Z		PICO WENT DOWN, REBOOT COMPUTER.
7/8/2009	0:00 - 10:30	10.50	DRLPRO	02	D	P		DRILL 7245'- 7764,520,WOB 15-20K, SPP ON/OFF BOTTOM-2350/2200 , PUMP 1SPM-58, PUMP 2 SPM-57, GPM-442, RPM-150, TQ ON/OFF BOTTOM--9/6, MW-11.4, VIS-40, BGG-150, SGAS-4600, ROP-45-110
	10:30 - 11:00	0.50	DRLPRO	07	A	P		LUBRICATE RIG

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: PROPETRO/, ENSIGN 145/145, MILES 4/4
Event: DRILLING	Start Date: 4/11/2009	End Date: 7/11/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:00 - 0:00	13.00	DRLPRO	02	D	P		DRILL 7764- 8149, WOB-15-21, SPP ON/OFF BOTTOM-2561/2365 , PUMP 1 SPM- 58, PUMP 2 SPM- 57, GPM- 442, RPM- 150, TQ ON/OFF BOTTOM-9/6, MW-12.0, VIS-42, BGG-450, SGAS -3200, ROP-25-120
7/9/2009	0:00 - 18:00	18.00	DRLPRO	02	D	P		DRILL 8149 - 8583, WOB-15-21, SPP ON/OFF BOTTOM-2561/2365 , PUMP 1 SPM- 58, PUMP 2 SPM- 57, GPM- 442, RPM- 150, TQ ON/OFF BOTTOM-9/6, MW-12.3, VIS-42, BGG-450-5700, LOST 100 BBLS MUD 8135 TO 8250, PUMPED 2 10 SX SAWDUST PILLS, 1 10 SX CEDAR FIBER PILL, HEALED UP, LEFT MW AT 12.0,ROP-25-120
	18:00 - 18:30	0.50	DRLPRO	07	A	P		LUBRICATE RIG
	18:30 - 23:00	4.50	DRLPRO	02	D	P		DRILL 8583- 8662, WOB-15-21, SPP ON/OFF BOTTOM-2561/2365 , PUMP 1 SPM- 58, PUMP 2 SPM- 57, GPM- 442, RPM- 150, TQ ON/OFF BOTTOM-9/6, MW-12.0, VIS-42, BGG-450-5700, 5-10FT FLARE , RAISE MW GRADUALLY TO 12.4 AT 8647, STARTED LOSING MUD, MIXING 3 SX/HR SAWDUST, PUMPED 10 SX SAWDUST PILL, ROP SLOWING DOWN, STRING TORQUING UP, DRILLED 8652 TO 8662, 3 WOB, ROP 4 TO 9 FT/HR, QUIT DRILLING AT 8662, CALLED IT TD AT 23:00
	23:00 - 0:00	1.00	DRLPRO	05	F	P		PUMP SWEEP, CIRC HOLE
7/10/2009	0:00 - 2:00	2.00	DRLPRO	05	F	P		PUMP SWEEP, CIRC HOLE
	2:00 - 6:30	4.50	DRLPRO	06	E	P		WIPER TRIP TO CSG SHOE
	6:30 - 7:00	0.50	DRLPRO	08	B	P		PULL WIPER RUBBER OUT OF GAS BUSTER INLET VALVE
	7:00 - 12:30	5.50	DRLPRO	06	E	P		TIH TO TD, REAMED 8522 TO 8662
	12:30 - 14:00	1.50	DRLPRO	05	F	P		PUMP SWEEP, CIRC HOLE
	14:00 - 20:00	6.00	DRLPRO	06	A	P		POOH W/ DP & BHA
	20:00 - 21:30	1.50	DRLPRO	06	A	P		LD DIR TOOLS
	21:30 - 22:00	0.50	DRLPRO	06	A	P		PULL WEAR BUSHING
	22:00 - 22:30	0.50	DRLPRO	11	D	P		RU LOGGERS
	22:30 - 0:00	1.50	DRLPRO	11	D	P		RIH W/ LOGGING TOOLS
7/11/2009	0:00 - 2:30	2.50	DRLPRO	11	D	P		RUN TRIPLE COMBO OH LOGS
	2:30 - 3:30	1.00	DRLPRO	11	D	P		RD LOGGERS
	3:30 - 6:00	2.50	DRLPRO	12	A	P		HOLD SAFETY MEETING, RU CASERS
	6:00 - 14:30	8.50	DRLPRO	12	C	P		RUN 204 JTS 4 1/2, I-80, 11.6# CSG W/ SHOE AT 8847'
	14:30 - 15:00	0.50	DRLPRO	12	C	P		PU LANDING JT, RU CMT HEAD, START CIRC OUT TRIP GAS
	15:00 - 17:00	2.00	DRLPRO	05	D	P		CIRC OUT TRIP GAS, RD CASERS, RU CEMENTERS
	17:00 - 19:00	2.00	DRLPRO	12	E	P		PUMP 40 BBLS WATER FLUSH, 572 SX, 206 BBLS 12.4# LEAD, 1100 SX, 206 BBLS 14.3# TAIL, DISPLACED W/ 124 BBLS WATER, BUMPED PLUG, FLOATS HELD, RETURNED 33 BBLS CMT TO SURFACE
	19:00 - 22:00	3.00	DRLPRO	12	E	P		RD CEMENTERS, CLEAN PITS, ND BOP, RELEASE RIG AT 22:00

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/25/2009	End Date: 10/7/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/21/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. ROADING RIG & RIGGING IN WINDY CONDUCTIONS.
	7:30 - 10:30	3.00	COMP	30	A	P		MOVE RIG IN & SPOT EQUIPMENT. TO WINDY TO RIG UP WAITED FOR 1 HR. THE WIND DIED DOWN ENOUGH TO RU.
	10:30 - 18:00	7.50	COMP	31	I	P		PU 3 7/8" BIT & SN. TALLY & DRIFT 271 JTS. OF 2 3/8" L-80 4.7# TBG. RIH TAG FILL @ 8,567'. RU POWER SWIVEL & RU RIG PUMP. STRAT DRLG OUT. DRL OUT 31' OF CEMENT & TAG FLOAT COLLAR @ 8,598' DRL COLLAR & 23' OF CEMENT. PBTD 8,621'. (18 OUT ON JT 273) CIRCULATE WELL CLEAN. PU 50' SWI SDFN
9/22/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. LAYING DOWN TBG & PRESSURE TESTING
	7:30 - 15:00	7.50	COMP	31	I	P		PRESSURE TEST CASING TO 3,000 PSI. HELD FOR 15 MN. POOH LAYING DOWN ON TRAILER 271 JTS. ND BOP NU FRAC VALVES. RDMO.
9/25/2009	7:00 - 7:15	0.25	COMP	48		P		HSM, REVIEW R/U WIRE LINE
	7:15 - 15:00	7.75	COMP	37	B	P		MIRU SCHLUMBERGER WIRE LINE, P/U RIH W/ PERF GUN, PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 8606'-8610' 4 SPF, 90* PH, 16 HOLES. 8558'-8560' 4 SPF, 90* PH, 8 HOLES. 8525'-8527' 3 SPF, 120* PH, 6 HOLES. 8496'-8498' 3 SPF, 120* PH, 6 HOLES. [42 HOLES] SWI READY TO FRAC MON.
	-							
9/28/2009	7:00 - 7:15	0.25	COMP	48		P		HSM, REVIEW FRACING & WORKING W/ WIRE LINE.

Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/25/2009	End Date: 10/7/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 17:00	9.75	COMP	36	E	P		STG #1] WHP=1700#, BRK DN PERFS @ 2824#, INJ PSI=4400#, INJ RT=50, ISIP=2427#, FG=.76. WHILE PUMPING FRAC N2 POP OFF POPPED. SD FOR 2 MIN. CONT FRAC. PUMP'D BBLS SLK WTR W/ # 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP= 2776#, FG=.76,40/42 CALC PERFS OPEN. PUMP 176 GAL SCALE INHIB SLUG IN THE LAST 84 BBL'S OF 2# STG. 12:18 SWI. 12:56 CAN'T CONT FRACING W/ ONLY 4 PUMP'S. NOT ENOUGH HORSE POWER FOR 50 BPM. FRAC CREW MAKE REPAIR'S OVER NITE. ((STARTED FRAC W/ 6 PUMPS. FINISH FRAC W/ 4 PUMP'S. NEAR SCREAN OUT ON THIS STG. CUT SAND 11,000# SHORT. NO 20/40 TLC IN THIS STG. FOUND 2 PUMP'S W/ FLUID ENDS CRACKED, 1 PUMP CROW'S FOOT INSIDE FLUID END WAS BROKE & 1 PUMP W/ SENCER ON MOTOR WOULD NOT LET PUMP MOTOR RUN.)) STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8576' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8606'-10', 4 SPF, 16 HOLES. 8558'-60', 4 SPF, 8 HOLES. 8525'-27', 3 SPF, 6 HOLES. 8496'-98', 3 SPF, 6 HOLES. 8444'-46', 3 SPF, 6 HOLES. POOH W/ WL. SWI. SDFN. WAIT ON FRAC CREW T/ MAKE REPAIRS T/ PUMP TRUCKS.
9/29/2009	7:00 - 7:15	0.25	COMP	48		P		HSM, FRACING & WORKING W/ WIRE LINE

Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/25/2009	End Date: 10/7/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 17:00	9.75	COMP	36	E	P		FRAC STG #2 MESAVERDE 8103'-8340' [44 HOLES] STG #2] WHP= 1901#, BRK DN PERFS @ 3504#, INJ PSI= 4600 #, INJ RT= 44, ISIP= 2841#, FG=.79, PUMP'D 764 BBLS SLK WTR W/ 22,446 # 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP= 2693#, FG=.76, AR=51.1, AP= 4569#, MR=51.8, MP=4946#, NPI= -148#, 44 /44 CALC PERFS OPEN. PUMP 87 GAL SCALE INHIB SLUG IN THE LAST 41 BBL'S OF 2# STG. STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8576' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8012'-8018' 4 SPF, 90* PH, 24 HOLES. 7958'-7962' 4 SPF, 90* PH, 16 HOLES. [40 HOLES] POOH. WHP= 1901#, BRK DN PERFS @ 2856#, INJ PSI= 5400 #, INJ RT=50, ISIP= 2654#, FG=.77, PUMP'D 969 BBLS SLK WTR W/ 30,000 # 30/50 MESH DID NOT GET ANY 20/40 TLC IN FORMATION. SCREEN OUT ON THIS STG. 57% FRAC IN FORMATION. OPEN WELL T/ PIT FOR 20 MIN. SWI F/ PIT. OPEN WELL T/ RESPOT SI SLUG & REFLUSH. 40/40 CALC PERFS OPEN. PUMPED 101 GAL CHEMICAL SLUG IN REFLUSH. (((BEFORE SHUTTING DOWN PUMPS, PSI REACHED 8400#.)))) FRAC CREW FLUSHED OUT TUB, LINES & POP OFF'S T/ PIT. FRAC CREW X-OVER T/ GREEN WELL. STG 4) PU 4 1/2 8K HAL CBP. RIH SET CBP @ 7884'. POOH. X-OVER FOR FRAC CREW. PSI TEST CSG W/ FRAC PUMP. DUE T/ OVER PSI ON STG 3. OPEN WELL PSI TEST T/ 6500#. GOOD TEST. BLEED OFF PSI. TURN WELL OVER T/ WL. PU 3 3/8 EXP GUN. 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PERF F/ 7850'-54', 4 SPF, 16 HOLES. 7822'-24', 4 SPF, 8 HOLES. 7790'-92', 4 SPF, 8 HOLES. 7750'-52', 3 SPF, 8 HOLES. 7718'-20', 3 SPF, 8 HOLES. POOH. SWI FN.
9/30/2009	7:00 - 7:15	0.25	COMP	48		P		HSM. SIM OPS.

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/25/2009	End Date: 10/7/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 18:00	10.75	COMP	36	B	P		STG 4)OPEN WELL 2050#. BEG PUMPING, BRK @ 3581# @ 4.3 BPM. SD ISIP 2543# FG .76. BEG FRAC, EST INJT RT @ 52 BPM @ 5700# = 100% PERF'S OPEN. PUMP 34,395# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. PUMP 97 GAL PILL OF SCALE INHIB IN THE LAST 2# STG. SD ISIP 2807# FG .79. SWI. X-OVER T/ GREEN WELL. ((THE TUB ON THE BLENDER WENT EMPTY 2 TIMES BECAUSE THE SURFRACTANT WAS BEING PUMPED STRAIT IN TUB, CAUSING THE TUB T/ FOAM UP REALY BAD.)) STG 5)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN. 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7640' P/U PERF F/ 7606'-10', 4 SPF, 16 HOLES. 7554'-56', 4 SPF, 8 HOLES. 7522'-26, 3 SPF, 12 HOLES. 7450'-52', 4 SPF, 8 HOLES. POOH. 12:50 OPEN WELL 1030#. BEG PUMPING, BRK @ 3530# @ 7.1 BPM. SD ISIP 1928# FG .69. BEG FRACING, EST INJT RT @ 50 BPM @ 4000# =100% PERF'S OPEN. PUMP 37,830# 30/50 WHITE & TAILIN W/ 5,000# 20/40 TLC. PUMP 105 GAL SCALE INHIB PILL IN THE LAST 2# STG. SD ISIP 2292# FG .74. STG 6)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7388' P/U PERF F/ 7356'-58', 4 SPF, 8 HOLES. 7308'-12', 3 SPF, 12 HOLES. 7264'-66', 4 SPF, 8 HOLES. 7214'-16', 4 SPF, 8 HOLES. 7130'-32', 4 SPF, 8 HOLES. POOH. 16:13 OPEN WELL 120#. BEG PUMPING, BRK @ 1888# @ 4.7 BPM. SD ISIP 1026# FG .58. BEG FRACING, EST INJT RT @ 50 BPM @ 4300# = 100% PERF'S OPEN. PUMP 58,480# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. PUMP 122 GAL PILL OF SCALE INHIB IN THE LAST OF THE 2# STG. SD ISIP 2045# FG .72. 16:52 SWI. X-OVER T/ BLUE WELL. STG 7)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN. 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7043' P/U PERF F/ 7010'-13', 4 SPF, 12 HOLES. 6933'-35', 4 SPF, 8 HOLES. 6856'-60', 3 SPF, 12 HOLES. 6818'-22', 3 SPF, 12 HOLES. POOH. SWI, SDFN.

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/25/2009	End Date: 10/7/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/1/2009	7:00 - 18:00	11.00	COMP	36	B	P		STG 7)OPEN WELL 200#. BEG PUMPING, BRK @ 2474# @ 4.7 BPM. SD ISIP 1213# FG .61. BEG FRACING, EST INJT RT @ 50 BPM @ 3400# = 100% PERF'S OPEN. PUMP 67,475# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. PUMP 128 GAL PILL OF SCALE INHIB IN LAST PART OF 2# STG. SD ISIP 2137# FG .74. 8:42 SWI. X-OVER T/ BLUE WELL. STG 8)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6754' P/U PERF F/ 6722'-24', 4 SPF, 8 HOLES. 6652'-60', 4 SPF, 32 HOLES. POOH. 12:22 OPEN WELL 180#. BEG PUMPING, BRK @ 1666# @ 3.7 BPM. SD ISIP 483# FG .51. FG WAS BELOW .54. CALL ENG. DID NOT FRAC THIS STG, DUE T/ VERY LOW FG. DONE FRACING ON THIS STG. PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 6602'. POOH. RD OFF THIS WELL.
10/6/2009	13:00 - 19:00	6.00	COMP	31	I	P		MOVE OVER FROM NBU 1022-2A3S. RUSU. ND FRAC VALVES NU BOP. RU FLOOR AND TBG EQUIP. MU 3-7/8" HURRICANE MILL, POBS, 1.87" XN AND RIH AS MEAS AND PU 208-JTS 2-3/8" L-80 TBG. TAG AT 6572'. RU PWR SWIVEL. READY TO D/O PLUGS IN AM. SDFN
10/7/2009	6:30 - 7:00	0.50	COMP	48		P		JSA- D/O PLUGS. PWR SWIVEL.

Operation Summary Report

Well: NBU 1022-2A2T [YELLOW]	Spud Conductor: 4/10/2009	Spud Date: 4/11/2009
Project: UTAH-UINTAH	Site: NBU 1022-2A PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 9/25/2009	End Date: 10/7/2009
Active Datum: RKB @4,987.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/NENE/6/PM/N/203.00/E/0/896.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 14:00	7.00	COMP	44	C	P		P-TEST TO 3000#. GOOD. EST CIRC AND C/O PLUGS. #1- C/O 30' SAND TO CBP AT 6602'. D/O IN 8 MIN. 0 # INC. (DID NOT FRAC). RIH #2- C/O 10' SAND TO CBP AT 6754'. D/O IN 3 MIN. 0# INC. RIH #3- C/O 35' SAND TO CBP AT 7050'. D/O IN 4 MIN. 0# INC. RIH #4- C/O 70' SAND TO CBP AT 7388'. D/O IN 7 MIN. 200# INC. RIH #5- C/O 30' SAND TO CBP AT 7640'. D/O IN 4 MIN. 100# INC. RIH #6- C/O 25' SAND TO CBP AT 7890'. D/O IN 3 MIN. 125# INC. RIH #7- C/O 20' SAND TO CBP AT 8040'. D/O IN 4 MIN. 50# INC. RIH #8- C/O 25' SAND TO CBP AT 8370'. D/O IN 5 MIN. 50# INC. RIH PBTD- C/O 30' SAND TO PBTD AT 8640'. (30' RATHOLE) W/ 273-JTS IN. CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 19-JTS. PU 7" 5K CAMERON HANGER. LUB IN AND LAND 254-JTS 2-3/8" L-80 TBG W/ EOT AT 8069.12'. DROP BALL. PULL TBG SUB. RD FLOOR. ND BOP. NU WH. PMP DOWN TBG AND RELEASE BIT SUB AT 2200#. RDSU. SET WH HOUSE. MOVE OVER. TURN WELL OVER TO FLOW BACK CREW. TBG DETAIL KB 13.00 BBL PMP 9851 7" 5K CAMERON HANGER 1.00 BBL RCVR 1800 254-JTS 2-3/8" L-80 8052.92 BBL LTR 8051 1.87" XN (FE) 2.20 315-JTS DELIVERED EOT 8069.12 61-JTS RETURNED
10/8/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1650#, 20/64" CK, 44 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 2694 BBLS LEFT TO RECOVER: 7157
10/9/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1700#, 20/64" CK, 35 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 1973 BBLS LEFT TO RECOVER: 7878
10/10/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2400#, TP 1550#, 20/64" CK,29 BWPH, MEDIUM SAND, -GAS TTL BBLS RECOVERED:2755 BBLS LEFT TO RECOVER:7096
	10:40 -		PROD	50				WELL TURNED TO SALE @ 1040 HR ON 10/10/09 - FTP 1650#, CP 2450#, 2050 MCFD, 27 BWPD, 20/64 CK
10/11/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2250#, TP 1450#, 20/64" CK, 27 BWPH, LIGHT SAND,1944 GAS TTL BBLS RECOVERED:3411 BBLS LEFT TO RECOVER: 6440
10/12/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2150#, TP 1400#, 18/64" CK, 24 BWPH,TRACE SAND, - GAS TTL BBLS RECOVERED: 5565 BBLS LEFT TO RECOVER: 4286